

A Complete Bibliography of Publications in the *Journal of Mathematical Physics: 2020–2024*

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254
FAX: +1 801 581 4148

E-mail: beebe@math.utah.edu, beebe@acm.org, beebe@computer.org (Internet)
WWW URL: <https://www.math.utah.edu/~beebe/>

17 October 2024
Version 1.10

Title word cross-reference

#P [67]. **#P-complete** [67].

$(2+1)$ [1868]. $(2 < p < 4)$ [203]. $(3+1)$ [1855]. (k, a) [1484]. $(n+1)$ [870].
 (p, k) [971]. (p, q) [1233]. (t_2, t_3) [1170]. $(U_q(f \sqcap (1, 1)), \zeta_{q^{1/2}}(2n))$ [95]. 1
[276, 619, 838, 726, 82, 307, 122, 671, 884, 775]. $1+1$ [255]. $1/N$ [687]. $1/r^2$
[897]. $1 < p < 2 < q < 6$ [996]. 2
[355, 321, 575, 229, 43, 236, 743, 832, 160, 615, 302, 63, 677, 975, 839]. 2×2
[1738, 188]. 3 [604, 459, 837, 743, 366, 61, 21, 871, 354]. $6j$ [1372, 1388]. *
[241]. $^{-1}$ [731]. 2 [748, 280]. 3 [353]. 2 [1398, 1265]. 3 [1532]. 34 [1532]. $_{IV}$
[639]. $_n$ [1084]. $_V$ [639]. $A[\operatorname{sech}(\lambda x) + i \tanh(\lambda x)]$ [1505]. A_n [781, 1149]. α
[219, 486]. $\alpha - z$ [325, 1709]. $\alpha \rightarrow 1$ [746]. B [1239, 1479]. B_n [1447]. $\bar{\partial}$ [765].
 β [687, 1839, 1277, 922]. C^* [1835]. C^* [1526, 880]. C^2 [1784]. $C^5 \otimes C^5$ [505].
 C^∞ [634]. $C_n(1)$ [1498]. $\mathcal{N} = 2$ [510]. \mathcal{O} [1660]. \mathcal{PT} [1505]. \mathcal{R} [1540]. χ^3
[1533]. $\operatorname{Cur}(\operatorname{sl}_2(\mathbf{C}))$ [1314]. D [225, 328, 656, 1622, 667, 258, 710, 789].
 $D^{1,p}(R^3)$ [1733]. $\ddot{x} + f(x)\dot{x}^2 + g(x) = 0$ [115, 114, 8, 5, 6]. $\dot{B}_{\infty, \infty}^{-1}$ [731]. E

[1748]. E^2 [1322]. E_6 [1661, 1755, 1617]. E_7 [1662]. $E_{7(-25)}$ [1617]. E_8 [1661, 1662, 1755, 1108]. $E_{\tau, \eta gl_3}$ [151]. $F(r)$ [1228]. g [1306, 303, 1009]. $g^{(2)}$ [1736]. $g^{(3)}$ [1736]. G_2 [1772]. G_2/I_6 [1736]. $gl(n) \otimes gl(n)$ [646]. $GL_q(2)$ [686]. h [1666]. H^2 [1047]. H^s [654]. $\neg \}$ (1) [1702]. i [1539]. K [1450, 1717, 1390, 789, 1817, 1386, 1416]. $k+1$ [576]. κ [247]. $K\iota_4$ [1148]. L^1 [1427]. L^2 [208, 726, 1771, 120]. L^∞ [574]. L^P [1871, 660, 167, 285]. L_∞ [371, 1660, 592, 999]. λ [953]. M [542, 1358, 1380]. M_2 [1158]. \mathbf{C} [1153]. \mathbf{P}^1 [30]. $\mathbf{R}^+ \times \mathbf{R}^3$ [1165, 1631]. \mathbf{R}^3 [1146, 935]. \mathbf{R}^6 [150]. $\mathbf{R}^d, d=1, 2, 3$ [282]. \mathbf{R}^N [814, 922]. \mathbf{R}^{n+1} [1084]. \mathbf{R}^{n+2} [1084]. \mathbf{Z}^d [1329, 1236]. \mathbf{Z}_2^2 [568]. \mathbf{Z}_2^n [134]. $\mathbf{Z}_2 \times \mathbf{Z}_2$ [28, 650]. $\mathcal{D}^b(X)$ [169]. $\mathcal{N} = 2$ [1151]. \mathcal{ON} [1177]. $\mathcal{S}(N)$ [113]. $\mathcal{W}_{q,t}(f\downarrow(2|1))$ [585]. $\downarrow(1)$ [1277]. $\downarrow \bigvee (1|2n)$ [1033]. $\downarrow \bigvee (1|2n) \supset \downarrow(n)$ [1033]. $f\downarrow_2$ [157, 1603, 914]. $f\downarrow_2[\text{ltimes}]L(4)$ [914]. $f\downarrow_n$ [1162]. $SU(2)$ [213]. μ [1382]. N [995, 1458, 669, 1098, 1127, 1457, 199, 1448, 1245, 1523, 245, 262, 294, 452, 1635]. $n^2 + 3$ [1223]. \natural_α [1082, 1487]. O [1497, 389]. $O(3)$ [1104]. Ω [1541]. $osp(1|2)$ [568]. P [984, 1452, 1530, 579, 653, 1593, 116, 1264, 1850, 1516, 1253, 658, 935, 857, 1081, 1555, 1025, 841, 471]. $p(x)$ [20]. $p\cdot$ [814]. ψ [1190, 703]. q [1433, 440, 830, 223, 1407, 526, 95, 186]. $Q(1)$ [1500]. q_{xx} [1283]. R [878, 1735, 953, 1312, 1177, 791, 646, 1149]. R^{1+1} [574]. ρ [695]. S [667, 462]. S^2 [1047]. $SDiff(S^2)$ [35]. σ [529]. $SL(2, \mathbf{R})$ [1813]. $SL(2, \mathbf{R})/U(1)$ [1813]. $sl(7)$ [667]. SL_2 [662]. sl_3 [1579]. $SL_q^*(2)$ [188]. $SO(3)$ [1579]. $SO(3)_p$ [1081]. $SO(N)$ [1537]. $Sp(N)$ [1772]. $SU(2)$ [1395]. $SU(N)$ [1537, 493, 1372]. τ [1333, 443]. $\tilde{SL}(2, \mathbf{R})$ [1398, 1265]. \times [1619]. U [1617, 1572, 1592]. $U(1)$ [1399]. $U(1)^N$ [510]. $U(1)_{B-L}$ [430]. $U(h)$ [1032]. $U_q(D_4^{(3)})$ [1255]. $U_q(sl_2^*)$ [188]. $V_D(x) = \min[(x+d)^2, (x-d)^2]$ [1353]. $V_S(x) = \max[(x+d)^2, (x-d)^2]$ [1353]. φ^{2k} [286]. φ^4 [556]. φ_4^4 [1631]. φ_4^4 [368, 1165]. \vee [469]. $VOA[M_4]$ [36]. W [585, 1313, 997]. $W_{1+\infty}$ [643]. W_3 [694]. X [1360, 824]. Z [553, 905]. Z_2 [1037]. Z_2^2 [1151]. Z_n [1149]. ζ [1278]. $|x-y|^{-2}$ [1643].

-abc [199]. **-adic** [1452, 1593, 1081]. **-algebras** [241, 371, 592, 1835, 1313, 1526]. **-Araki** [830]. **-associative** [1541]. **-based** [660]. **-body** [1271, 294]. **-bridge** [832]. **-calculus** [526]. **-Camassa** [1382]. **-coherent** [526]. **-component** [462]. **-contact** [1416]. **-convex** [1380]. **-critical** [1771, 120]. **-D** [276]. **-deformation** [1433]. **-deformations** [999]. **-Deformed** [247, 526, 186, 1277]. **-dependent** [824]. **-difference** [1407]. **-dimensional** [667, 82, 1245, 316, 416, 452, 1868, 328]. **-dimensions** [258, 710]. **-dressing** [765]. **-evolution** [922]. **-exact-solvability** [667]. **-extension** [430]. **-fidelity** [1264]. **-form** [529]. **-free** [1032]. **-functions** [443, 1278]. **-generalized** [1484]. **-graded** [1619, 134, 1151, 568, 1153, 28, 650, 553, 1149]. **-gravity** [1622]. **-Harish-Chandra** [914]. **-Hilfer** [1190, 703]. **-Jacobsthal** [1233]. **-Kirchhoff** [1850]. **-Kropina** [1358]. **-Laplace** [814, 1555]. **-Laplacian** [653, 1530, 1306, 579, 116, 20, 1516, 1253, 658, 935, 1025, 841, 471]. **-level**

[669]. **-Lie** [695]. **-manifolds** [852]. **-matrices** [646, 1735]. **-matrix** [1312, 1149, 878, 542]. **-matrix-Nijenhuis** [1177]. **-minimal** [1360]. **-models** [1748]. **-modules** [1033, 1498]. **-Navier** [303, 486, 1009]. **-operators** [1497, 1660, 1540, 389]. **-order** [870]. **-oscillators** [95]. **-particle** [262]. **-plane** [223, 1839]. **-point** [1457]. **-polynomials** [526]. **-rational** [1736]. **-Rényi** [1709, 1082, 1487]. **-semitoric** [1479]. **-soliton** [995]. **-solutions** [656, 1871]. **-spaces** [285]. **-spacetime** [1119]. **-spin** [791, 857]. **-stable** [219]. **-state** [1037]. **-states** [667]. **-structures** [1660, 1177]. **-superalgebra** [585]. **-superalgebras** [997]. **-supercritical** [208, 120]. **-systems** [469]. **-tensor** [241, 880]. **-term** [1283]. **-th** [1386, 1448]. **-theory** [1450, 1717, 1390, 789, 1817]. **-topological** [1037]. **-torsion** [789]. **-transformations** [1666]. **-type** [764, 1239]. **-valued** [646]. **-weak** [905]. **-wise** [984]. **-Zakharov** [1170].

1 [510]. **1-dimensional** [1834]. **1/** [280]. **1/2** [645, 885, 510]. **1/2-BPS** [510]. **1d** [1607, 1695, 1341, 1455].

2-BPS [510]. **2-D** [1625]. **20** [479]. **2D** [1095, 1099, 1573, 1362, 992, 1298, 1333, 1297, 1494, 1444, 1188, 1676, 1531, 1209, 1467, 1044, 1731, 1175, 1629, 1009, 1489, 1723, 1575, 1086].

3 [695]. **3-** [695]. **3-form** [1860]. **3D** [1095, 1060, 1444, 1778, 1207, 1690, 1210, 1578, 1343, 1422, 1425, 1616, 1340, 1649, 1381, 1478, 1576].

4-regular [1056, 1757].

53 [384]. **54** [115, 114, 8, 6]. **55** [8]. **56** [447]. **59** [808, 835].

60 [606, 54, 80]. **61** [195, 651, 448, 196, 1203, 269, 1336]. **62** [652, 653, 970, 1095, 865, 607]. **63** [1337, 1374, 1293, 932, 1133, 1487, 988]. **64** [1753]. **65** [1688, 1755, 1754].

= [1701].

ABC [764, 199]. **abelian** [1538, 1401, 1198, 1472, 1656, 69, 1225, 1860, 536]. **Ablowitz** [961, 1844, 1868]. **Absence** [1436, 224, 860, 1614, 1367, 846, 1559]. **Absolute** [48]. **absolutely** [1609, 741]. **absorbed** [959]. **absorbing** [918]. **absorption** [285]. **abundance** [1403]. **accelerating** [1542]. **acceleration** [1048]. **acceptor** [212]. **Accessible** [742]. **accidental** [589]. **accommodate** [1865]. **according** [581]. **acknowledgment** [15]. **acoustic** [26]. **acoustic-type** [26]. **Across** [216]. **acting** [669]. **action** [1539, 1819, 1408, 1721]. **action-angle** [1721]. **action-dependent** [1408]. **ad** [317]. **adaptation** [617]. **addition** [1648]. **additive** [1514, 138]. **additivity** [1397]. **adeles** [1259, 1705]. **adelic** [806]. **Adiabatic**

[879, 974, 312, 284, 214, 1243, 279, 1197]. **adic** [1452, 1593, 1081]. **adjoint** [147, 1665, 25, 448, 148, 820, 1704, 1620]. **adjointness** [426]. **admitted** [154]. **AdS** [1398, 1265, 1228]. **advection** [142]. **advection** [44]. **affects** [1053]. **Affine** [1328, 997, 618, 1513, 1622, 1359, 1702, 38, 628, 1277, 1578]. **affine-null** [628]. **against** [1683]. **age** [956]. **age-structured** [956]. **ageing** [1702]. **aggregation** [331]. **Aharonov** [497, 1606]. **Airy** [569]. **aka** [1736]. **Algebra** [334, 1151, 188, 1035, 1110, 878, 1106, 113, 1813, 29, 287, 1661, 1662, 1755, 667, 494, 11, 197, 792, 1312, 1073, 328, 256, 1709, 511, 1702, 1877, 186, 342, 478, 129, 1485, 1289, 1836, 694, 1860, 1736, 915, 1603]. **Algebraic** [661, 1547, 883, 1002, 886, 1179, 783, 713, 1701, 1334, 1291, 820, 1595, 639, 1146, 1548, 455]. **algebraically** [333]. **Algebras** [1109, 931, 134, 845, 1619, 191, 695, 543, 495, 1153, 239, 440, 830, 1069, 1701, 371, 736, 999, 1660, 27, 367, 95, 140, 592, 1812, 241, 979, 715, 1835, 62, 650, 1313, 1386, 1257, 129, 389, 422, 1526, 268, 968, 424, 361, 1773, 1736, 1032, 260, 1541]. **algebroid** [592, 50]. **algebroids** [507, 410, 998]. **algorithm** [1407, 34, 1814, 1197]. **algorithmic** [467, 1322]. **algorithms** [466]. **aligned** [722]. **alignment** [1341]. **all-real** [190]. **Allen** [911]. **Almost** [920, 540, 210, 560, 82, 458, 1777, 1014, 1451]. **almost-periodic** [82]. **almost-periodically** [458]. **along** [1169, 771]. **also** [1292]. **Ambarzumyan** [896]. **Ambarzumyan-type** [896]. **Ambient** [1710, 1084, 1589]. **Ambient-space** [1710]. **Ambrosetti** [1137]. **among** [1840, 1498]. **amplification** [659]. **amplitude** [1224, 1231, 214, 1004]. **amplitudes** [557]. **an-harmonic** [477]. **Analog** [1509]. **Analogies** [1074]. **analogs** [1198, 1532, 1241]. **analogue** [1745]. **Analogues** [1305]. **analogy** [1260]. **Analysis** [1682, 1018, 1323, 1335, 1543, 872, 800, 1484, 991, 1590, 1413, 670, 1617, 1848, 45, 1068, 123, 801, 508, 617, 1674, 151, 44, 1860, 1341, 621, 351, 192, 2, 1564, 1599, 1642, 1247, 913, 1031]. **Analytic** [1045, 1595, 981, 1685, 347, 25, 448, 313, 1677, 1825, 1353, 1458]. **Analytical** [409, 838, 1172, 801, 33, 1125]. **Analyticity** [146, 1446, 1544, 902, 958, 1796]. **analyzed** [1720]. **Anderson** [1626, 472, 1607, 671, 884, 1189, 1784]. **Ando** [1041, 1545]. **angle** [724, 1721]. **Angular** [833, 1711, 1577]. **Angular-radial** [833]. **anharmonic** [945, 1061, 1212, 787]. **Anisotropic** [1149, 1402, 1438, 655, 1142, 232, 1731, 1175]. **annealed** [1607]. **annihilation** [144, 296, 1682]. **annular** [161]. **annulus** [1001]. **anomalies** [1391]. **Anomalous** [861, 636]. **Anomaly** [1400]. **ansatz** [713]. **anti** [1788, 1252, 186, 847, 1208, 982]. **anti-Chaplygin** [1252]. **anti-de** [982, 1788, 186, 1208]. **anti-Zeno** [847]. **antiferromagnetic** [541, 105]. **antivortices** [166, 805]. **any** [1137, 347]. **anyon** [1583]. **anyonic** [497]. **anyons** [1472, 210]. **aperiodic** [411, 1390]. **aperture** [1787]. **appearance** [1038]. **Application** [675, 1055, 102, 1757, 1182, 34, 524, 985, 215, 1526, 266]. **Applications** [411, 173, 955, 1745, 1153, 1484, 1111, 1267, 1129, 1858, 574, 979, 148, 465, 650, 1877, 707, 789, 1740, 108, 1732, 1868]. **applied** [129]. **Applying** [722]. **approach** [1610, 1194, 1371, 1242, 1039, 1513, 1110, 858, 1413, 1346, 661, 897, 378, 995,

1561, 443, 864, 1520, 820, 476, 657, 1168, 1674, 1404, 1322, 132, 300, 966,
 1285, 193, 1098, 1081, 1548, 1237, 1469, 1721, 1448, 1623, 1847, 281].
approaches [1219, 1817]. **Approximate** [757, 1125, 880, 1866].
approximating [1708, 466]. **approximation**
 [1117, 1096, 1282, 1760, 284, 210, 383, 518, 1432, 1804]. **approximations**
 [1815, 1147, 1079, 633, 750, 632, 689, 1880]. **Araki** [830]. **arbitrary**
 [795, 1417, 1167, 245, 857]. **Archimedean** [49]. **Area** [1737, 974].
area-constrained [974]. **Arf** [791]. **Arf-invariant** [791]. **arises** [1862].
arising [1656, 166, 1701, 1059, 122, 571, 1799]. **Arithmetic** [1784]. **arrays**
 [774]. **Artificial** [1260]. **ARW** [1683]. **Asakura** [1559]. **Asakura-Oosawa**
 [1559]. **ASD** [439]. **Askey** [95]. **aspects**
 [438, 144, 1547, 447, 7, 512, 139, 50, 410]. **assisted** [822, 1461, 947].
associated [1795, 783, 1069, 878, 1813, 29, 1764, 964, 340, 1065, 1211, 465,
 545, 1685, 171, 1447, 649, 1196, 151, 965, 1521]. **associative**
 [1194, 845, 188, 999, 1541]. **asymmetric** [1389, 1811, 1842, 1319].
Asymptotic [800, 890, 950, 473, 1342, 1298, 92, 1297, 809, 1065, 1756, 218,
 434, 414, 1833, 1307, 1722, 1683, 1700, 1007, 307, 1341, 222, 141, 158, 636,
 491, 986, 267, 762, 195, 81, 1809, 87, 196, 1460, 1531, 1213, 1731, 1185, 131,
 1564, 1616, 1278, 1799, 21, 1732, 1240]. **asymptotic-preserving** [1460].
asymptotical [104]. **Asymptotically**
 [817, 1009, 1008, 1268, 329, 1511, 270, 824, 982]. **Asymptotics**
 [719, 1808, 1676, 637, 1058, 1609, 971, 836, 234, 1523, 1352, 1283, 913].
Atiyah [1453]. **atmosphere** [279]. **atmospheric** [1442]. **atom**
 [496, 1040, 1836]. **atomic** [1544, 33]. **atoms** [408, 947, 176, 1318]. **attraction**
 [816, 818, 732, 315, 532]. **attraction-repulsion** [816, 818, 732, 532].
attractive [549, 1823, 492, 63]. **attractor** [303, 291, 922, 1087]. **attractors**
 [1530, 474, 954, 1188, 956, 374, 1253, 677, 815, 1361, 632, 1732, 1441, 471, 873].
automata [743, 1095, 290, 1053]. **automorphism** [1158]. **autonomous**
 [1187, 1532, 333, 473, 291, 374, 1534, 1322, 1516, 222, 221, 1087, 1009, 632, 689].
autonomy [1732]. **Average** [210, 1234, 889]. **Averaging**
 [1746, 1350, 1581, 1566]. **Avoided** [111]. **Aw** [1252, 1432]. **axial** [1402].
axially [1166, 1067]. **axiom** [1356]. **axiomatic** [1219, 1613]. **axis** [854].
axisymmetric [246, 837, 1690, 1422]. **Aztec** [1365].

b [388, 452]. **b-family** [388]. **Babylonian** [1518]. **back** [1102]. **background**
 [604, 69, 663, 481, 1049, 56, 1837, 347]. **backgrounds** [1474, 1199, 1552].
Bäcklund [1752]. **Backward** [613, 1732]. **Bakry** [1360]. **Bakry-Émery**
 [1360]. **balance** [1737, 122]. **balancing** [827]. **ball** [910, 1840]. **Ballistic**
 [605]. **balls** [1572, 727]. **band** [712]. **Bands** [741, 1580]. **bandwidth** [712].
bang [1588]. **Bannai** [239]. **Bardeen** [846]. **Bargmann** [213]. **barotropic**
 [123, 1839, 1274, 480]. **barrier** [1688, 1644]. **barriers** [1777]. **based**
 [188, 154, 634, 660, 401, 1444, 322, 1404, 788, 1375, 1448, 1849]. **Bases**
 [1033, 1686, 1002, 171, 1470]. **basic** [1635]. **basis** [1262]. **bath** [619, 1220].
Baxter [736, 1150, 999, 1314, 715, 343, 968, 915, 1092, 1541]. **Bayesian**

[1004]. **BCD** [643]. **be** [1612, 1556]. **beam** [156, 458, 1308, 1031]. **BEC** [587]. **behavior** [491, 473, 762, 809, 81, 947, 1809, 576, 530, 162, 1063, 1854, 58, 1558, 1700, 307, 732, 1652, 167, 222, 94, 141, 1599, 1616, 21, 1324, 418, 354, 1240]. **behaviors** [702, 853, 1010, 103, 1722, 1318, 1286]. **behind** [635]. **Bell** [740, 505]. **Bell-test** [740]. **below** [236, 941, 796, 1691, 201]. **Beltrami** [1830]. **Bénard** [1209, 1731]. **bending** [630]. **Benson** [586]. **Benson-Ratcliff** [586]. **bent** [1762]. **Berezin** [269, 189]. **Berezinian** [1107]. **Berger** [1087]. **Bernoulli** [522]. **Bernoulli** [193, 671, 884, 1237, 1189]. **Berry** [661]. **Bessel** [1415, 1585, 603, 1132]. **beta** [985]. **Bethe** [713]. **between** [1567, 1619, 1507, 682, 1389, 322, 876, 903, 641, 1817]. **Beyond** [1504, 1071, 98, 1246, 1264]. **BGK** [977, 1871, 1345]. **bi** [684, 305, 1638]. **bi-drifting** [305]. **bi-Hamiltonian** [684, 1638]. **bialgebras** [1451]. **Bianchi** [1594, 1554, 1301]. **biconfluent** [808, 10]. **bidiagonal** [749]. **Bifurcation** [1469, 142, 1231, 261, 1477, 1464]. **bifurcations** [598, 400]. **Big** [1588]. **Big-bang** [1588]. **bihamiltonian** [1411]. **bilayer** [724, 1377]. **Bilinear** [443, 308, 499, 1413]. **billiards** [293]. **bilocal** [1473]. **bimodules** [241]. **binomial** [1620]. **bipartite** [214]. **bipartitions** [1612]. **birational** [292]. **birefringence** [1614]. **Birkhoff** [886]. **birth** [1054]. **bispectral** [1579]. **Bistritzer** [1761, 1377]. **biwave** [906]. **BKP** [1752, 1015, 1561, 443, 462]. **black** [1824, 1474, 673, 515, 398, 14, 606, 329, 1055, 691, 874, 1228, 1825, 594]. **black-hole** [1055]. **blackhole** [1260]. **Bloch** [780, 408, 1726, 1147, 995, 1595, 307]. **Block** [1435, 1093, 712, 1565]. **Block-circulant** [1435]. **block-diagonalization** [1093]. **blocks** [561, 1540]. **Blow** [388, 575, 816, 272, 725, 1296, 1496, 55, 612, 537, 534, 155]. **Blow-up** [388, 816, 725, 1296, 1496, 55, 612, 537, 534, 155]. **blowing** [910]. **blowing-up** [910]. **blowup** [862, 1797, 842, 1725]. **BMO** [731]. **BMS** [1672]. **BMS-supertranslation** [1672]. **bodies** [1043]. **body** [1271, 1124, 667, 1021, 1072, 433, 294, 1559]. **Bogoliubov** [320, 1775, 664]. **Bogoliubov-Fröhlich** [320]. **Bogoyavlensky** [1413]. **Bohm** [497, 1803, 849, 1606]. **Boltzmann** [1330, 481, 934, 1301, 1627, 58, 907, 1100]. **Boltzmann-scalar** [934, 1301]. **bond** [1154, 1389]. **bonding** [1326]. **Bonnet** [370]. **Bonus** [350]. **Bopp** [1534]. **Born** [1614, 47]. **Bose** [1071, 1020, 1113, 492, 170, 63, 1021, 1072, 380, 1278, 152, 315]. **boson** [549, 1077, 1578]. **Bosonic** [1338, 11, 197, 1743, 526, 210, 696, 894, 323]. **bosons** [543, 990, 1070, 334, 718]. **both** [199]. **bottom** [1801]. **Bound** [175, 652, 774, 651, 1117, 1472, 862, 1071, 1591, 386, 1766, 1003, 170, 1856, 622]. **boundaries** [330, 872, 1861, 1547, 1172, 759, 313, 1654]. **Boundary** [557, 1471, 982, 1543, 1008, 91, 470, 1573, 1062, 1362, 1853, 1765, 459, 1524, 1254, 1446, 969, 1768, 1266, 535, 310, 1653, 612, 1144, 1695, 1141, 47, 1706, 1645, 1588, 963, 1655, 1562, 876, 453, 1428, 1800, 1801, 690, 1548, 332, 1102, 540, 755, 200, 1067, 1303, 1423, 1847, 1086, 1583]. **Bounded** [1024, 1573, 1376, 488, 1691, 21, 769]. **Boundedness** [1442, 816, 1462]. **Bounds** [1827, 1874, 822, 784, 1628, 1329, 574, 1236, 688, 1417, 394, 74, 671,

747, 621, 1796]. **Bourgain** [989]. **Boussinesq** [80, 1099, 1676, 1833, 1175, 1241, 1692, 684, 416, 12, 975, 1283, 1465, 1422, 540, 839, 1804]. **box** [970, 786, 492]. **box-shaped** [492]. **BPS** [900, 510]. **brackets** [1440, 301]. **Bragg** [1390, 1318]. **braid** [126, 1539]. **braided** [126, 880]. **braiding** [673]. **branching** [1033]. **branes** [555]. **breakdown** [284]. **breaking** [1299, 206, 1246, 1169, 224, 1192, 1822, 100, 1064]. **breather** [864]. **breathers** [1123]. **Bresse** [1103, 1700]. **bridge** [832]. **Brillouin** [796]. **broadcast** [101, 623]. **broken** [1848, 547]. **Brown** [1125]. **BRST** [1860]. **BTZ** [794]. **buckling** [836]. **building** [1282]. **Bulk** [1351, 1583, 1258, 933, 1051]. **Bulk-to-boundary** [1583]. **bump** [1216]. **bundle** [295, 525, 1284, 1255, 885, 889]. **bundles** [763, 644, 1617, 30, 804, 1256]. **Burgers** [1883, 1808, 613, 1655, 1566]. **BV** [1163].

C [241, 1677]. **Caffarelli** [772]. **Cahn** [1214, 1381, 1746, 911]. **Calabi** [139]. **Calculation** [639]. **calculations** [33]. **calculi** [686]. **calculus** [1710, 526, 494, 83, 1203, 1200]. **Callias** [1501]. **Calogero** [609, 107]. **Camassa** [273, 1299, 1382, 870, 1246, 340, 1689, 576, 55, 972, 728, 1536, 108, 1615, 165, 199, 1659]. **cancellation** [1400]. **cancer** [1136, 1872]. **cannot** [1612, 1556]. **Canonical** [1410, 508, 256, 627]. **canonoid** [1410]. **Cantor** [1392]. **Capacity** [101]. **capillarity** [352]. **Caputo** [1878, 545, 1616]. **Carleman** [617]. **Carroll** [1334]. **Carroll/** [1334]. **Carrollian** [257]. **carrying** [69]. **Cartan** [371, 461, 1622, 1036, 1783]. **cartoon** [394]. **case** [208, 1581, 883, 861, 379, 157, 209, 796, 1208, 1059, 280, 1380]. **cases** [1545, 1430]. **Casimir** [113, 715, 422, 782]. **categories** [126, 241, 880]. **Cattaneo** [835, 9]. **Cauchy** [992, 490, 682, 1330, 1884, 1209, 654, 302, 844, 1476, 1029, 531, 939, 871, 23, 1576, 1863]. **causal** [254, 367]. **causality** [516, 72, 1321]. **cavitation** [520, 1468, 1680, 770]. **cavity** [1568, 947, 1704, 417, 1067]. **Cayley** [1333, 979, 300]. **cell** [1136, 1460, 1323]. **cell-to-cell** [1323]. **cellular** [743, 1095, 290, 1053]. **center** [41, 1324, 161]. **central** [827, 1271, 1043, 1040, 892, 1508, 433, 1235]. **centrally** [662]. **certain** [1835, 1584, 1831]. **CFT** [1097]. **chain** [541, 565, 1162, 1857, 784, 687, 799, 45, 338, 645, 300, 375, 1462]. **chains** [683, 1258, 1178, 348, 1389, 1317, 1455, 1366]. **Chandra** [914]. **Change** [802]. **changes** [856]. **changing** [118, 1023, 488, 730, 1570, 16, 314, 926, 729, 1173]. **channel** [850, 101, 1627, 1587]. **channels** [177, 1161, 1083, 620, 623, 253, 1221, 250]. **Chaos** [1086]. **Chaotic** [332]. **Chaplygin** [530, 1063, 1252, 936, 1248, 94, 1432]. **characteristic** [345, 1407]. **characteristics** [1689, 747, 1587]. **Characterization** [716, 463, 237]. **Characterizations** [1042]. **characterized** [595]. **Characterizing** [1779]. **characters** [1621, 348, 1239]. **Charge** [1346, 1383, 69, 663, 1074, 353]. **Charged** [1232, 1474, 663, 404, 1051]. **charged-particle** [663]. **charges** [1552, 753, 1007, 1672, 1860]. **Chebyshev** [1073]. **Chemical** [1331, 1682]. **chemically** [991]. **chemicals** [816]. **chemo** [537]. **chemo-repulsion** [537]. **chemotaxis** [57, 816, 818, 533, 732, 1143, 1599, 1799, 939, 1024].

chemotaxis-consumption [1599]. **chemotaxis-Navier** [939].
chemotaxis-Stokes [1024]. **Chern** [1622, 489, 73, 370, 1798, 574, 996, 1580].
chevron [162]. **Chiral** [287, 1761, 53, 1350, 1581, 1258, 1743, 1502, 724].
chirality [1346, 260]. **Choi** [1546, 1159]. **choice** [947]. **cholera** [1640, 1636].
Choquard [653, 579, 1244, 386, 733, 1699, 17, 153, 1105]. **Choquard-type**
 [1244, 17]. **choreographic** [294]. **CHSH** [740]. **Chua** [1477]. **circle**
 [1111, 402]. **circuit** [561, 1477]. **circuits** [949, 401]. **circulant** [1435, 572].
Circular [712]. **CKP** [718]. **class**
 [330, 1452, 1664, 118, 597, 259, 1363, 1729, 910, 1244, 1650, 927, 1657, 229,
 834, 969, 1766, 1835, 488, 1125, 232, 17, 730, 151, 184, 1384, 266, 646, 436, 33,
 252, 843, 869, 1340, 1784, 1876, 1429, 1296, 278, 873, 590]. **classes**
 [1499, 1450, 875]. **Classical**
 [766, 369, 1000, 1440, 1859, 1519, 1196, 1800, 1801, 563, 1862, 1038, 722, 177,
 1222, 1573, 344, 98, 1036, 687, 559, 1065, 1083, 128, 243, 524, 1313, 227, 955,
 1367, 646, 1149, 968, 361, 1394, 1395, 375, 353, 1556, 247, 281, 390].
Classification
 [1148, 115, 489, 1414, 140, 429, 114, 650, 1158, 8, 5, 6, 568, 1512, 696, 416, 505].
classify [1817]. **Clifford** [1095, 134, 297, 67, 949, 743, 1178]. **climate**
 [1567, 1651, 994]. **cloned** [1556]. **close** [409, 1510]. **close-packed** [409].
closed [1739, 395, 1358, 1068, 1826]. **cloud** [299]. **Cluster** [1088, 1329, 1327].
CMA [439]. **CMV** [1864]. **co** [1410, 169, 125]. **co-tropical** [169]. **coalescing**
 [959]. **coarse** [281]. **coarse-grained** [281]. **cocycles** [1677, 672]. **code**
 [1548, 1434]. **codes** [101, 429, 1160]. **codimension** [1267]. **COE** [640].
coefficient [1109]. **coefficients**
 [168, 355, 1821, 1730, 1700, 1074, 802, 1705, 824]. **Coexisting** [805].
Coherence [551]. **Coherent** [244, 78, 591, 648, 1289, 1836, 1795, 526, 548,
 321, 668, 1396, 97, 323, 334, 550, 738, 1319]. **cohomogeneity** [256].
cohomogeneity-one [256]. **Cohomologies** [1497]. **Cohomology**
 [1150, 845, 1660, 139, 363, 1541]. **cohomotopy** [555]. **coincide** [1219].
Collection [1624, 1886]. **Collective** [944]. **colliding** [1632]. **collisions** [903].
colored [1555]. **coloring** [683, 948]. **colour** [1619]. **Combinatorial**
 [1498, 1261]. **Combined** [172, 996, 1543, 1884, 484]. **combustion** [1344].
Comment [652, 115, 195, 651, 447, 808, 970, 114, 196, 384, 8, 351, 1336].
common [177, 465]. **communication** [98]. **communications** [890].
Commutative [789, 624, 780, 292, 324, 1503]. **commutativity** [1034].
commutator [1257]. **Commutators** [1238]. **commuting** [1718]. **compact**
 [1104, 1250, 373, 1466, 1525]. **compactification** [625, 1118]. **compactness**
 [1306]. **Comparison** [1817, 1792, 798, 1263]. **compatibility** [1039, 554].
compatible [1660]. **competing** [840, 877, 300, 1384, 571]. **competitive**
 [1335]. **Complementarity** [641]. **Complete**
 [331, 256, 404, 853, 1585, 67, 139, 1473, 305]. **Complex**
 [918, 1795, 1006, 190, 1483, 1664, 1052, 1435, 473, 954, 358, 1764, 1681, 1456,
 826, 865, 293, 1637, 617, 1451, 1564, 632, 1505, 913, 1623, 1697]. **Complexity**
 [1437, 971, 1168, 857, 889]. **component**

[1532, 1299, 1066, 777, 1756, 462, 55, 764, 765, 152, 534, 165, 1247, 1868, 1659].
components [1425]. **composite** [734]. **Compositional** [1368, 1613].
compound [101]. **Compressible**
[608, 417, 991, 1573, 679, 992, 1693, 838, 1172, 575, 577, 1254, 1568, 1600, 812,
1206, 1063, 352, 1854, 1274, 1493, 1558, 938, 60, 75, 22, 453, 167, 1341, 1769,
61, 1210, 1343, 89, 21, 480, 1340, 1649, 23]. **computation** [44, 672].
computer [822]. **computer-assisted** [822]. **computers** [34]. **Computing**
[1312, 381, 1404]. **concave** [996]. **concavity** [1545]. **concentrated**
[1276, 601]. **Concentration**
[1182, 1468, 857, 520, 877, 164, 1680, 770, 418, 1105]. **conceptual** [13, 54].
concise [621, 1294]. **Condensate** [1504]. **condensates**
[881, 1115, 737, 492, 152, 315]. **condensation** [543, 1113, 380]. **condensed**
[1391, 449]. **condition** [1573, 1840, 741, 47, 690, 332, 1441, 1303, 1847, 1086].
conditional [43, 1003, 1080, 1630, 802]. **conditioned** [1645]. **conditions**
[1543, 91, 1363, 1062, 1765, 1254, 1446, 1137, 941, 1266, 535, 52, 932, 888,
1144, 232, 393, 963, 1562, 1005, 1802, 1457, 325, 1423, 278, 982].
conductance [319]. **conducting** [991, 608, 1787, 753, 183, 1102, 354].
conduction [1833, 1558, 23]. **conductive** [600, 938, 167]. **conductivity**
[475, 420, 1051, 942, 460, 1380]. **cones** [1552]. **confidential** [101].
configuration [136]. **configurations** [1271, 1043, 711, 1453, 433, 1235].
confined [1704]. **confinement** [1606]. **confluent** [1415, 1116, 1058, 1521].
Conformal [1314, 263, 1177, 845, 1148, 1153, 1512, 1110, 1069, 887, 356,
1320, 218, 150, 511, 1743, 1032, 71, 1541, 793]. **conformally** [527, 1164].
conformation [832]. **conicity** [147]. **conjecture**
[1687, 1830, 1453, 1537, 1772]. **conjugacy** [1499]. **conjugation** [1346].
Conley [1518]. **Connecting** [1846, 1716, 93]. **connection**
[1619, 1862, 708, 507, 644, 293]. **connections** [570, 1622, 1068]. **Connes**
[102]. **consequences** [1412]. **Conservation**
[130, 403, 1383, 355, 233, 720, 485, 599, 316, 769]. **conservative**
[912, 777, 1689, 524, 728, 1536, 221]. **conserved** [570, 708, 1860]. **conserving**
[1460]. **consistency** [1000]. **consistent** [898, 1757]. **constant**
[1710, 722, 1229, 951, 1873, 1101, 372, 1549, 1678, 564]. **constant-curvature**
[1710]. **constants** [397, 1510, 562]. **Constrained**
[855, 1781, 1786, 1447, 1138, 1221, 974]. **Constraint** [1860, 503, 1720].
constraints [1669, 506, 607, 337]. **constructing** [154]. **Construction**
[1311, 900, 867, 1261, 962, 1450, 794, 625, 1118]. **Constructions** [1479].
Constructive [567]. **consumption** [868, 1599]. **Contact**
[1830, 1410, 1094, 1013, 42, 1416, 1186, 855]. **Contextuality** [1075].
continua [1865]. **Continuation** [1633, 981, 1691]. **Continuity**
[1010, 253, 411, 48, 1329, 1174, 1793, 303, 1003, 1677, 747, 815]. **Continuous**
[1169, 511, 1609, 1383, 900, 741, 373, 648, 327, 149, 796, 1492, 778, 1288].
continuum [774, 501, 1133, 1076, 1217]. **contraction** [772, 511].
contractions [465]. **Contractivity** [830]. **contributions** [557]. **control**
[858, 136, 1571, 1846, 1190, 566]. **Controllability** [308, 499, 1230, 704].

controlled [1740]. **controls** [1224]. **convection** [1364, 74]. **Convergence** [1300, 640, 1489, 1654, 1224, 737, 633, 796, 253, 621, 1728]. **convergent** [1597]. **converging** [409]. **Converting** [848, 666]. **convex** [933, 669, 996, 1380]. **Convexity** [1067, 1545]. **Cooper** [846]. **cooperating** [623]. **cooperative** [1641]. **coordinate** [848, 641]. **coordinates** [1157, 854, 628, 666]. **Coprime** [795]. **Coprime** [795]. **Coprime-preserving** [795]. **copy** [1401]. **coral** [939]. **corank** [178]. **Coriolis** [1806]. **correction** [174, 1229, 1815]. **corrections** [719]. **correlated** [405, 1080]. **Correlation** [177, 1587, 1365, 45, 958, 717]. **correlations** [1885, 137, 1012, 920]. **Correlators** [1162]. **correspondence** [1351, 1097, 642, 591, 96]. **cosine** [759]. **Cosmic** [1656]. **cosmological** [528, 722, 951, 1405, 631, 1837]. **cotangent** [295, 525]. **Couette** [1099]. **Coulomb** [479, 1415, 1062, 833, 1, 1019, 428, 1549, 1648, 1012, 49, 899]. **Coulomb-like** [833]. **counter** [1631]. **counter-terms** [1631]. **counterexample** [1687]. **counterpart** [1121]. **Counting** [67]. **counts** [1867]. **Coupled** [1712, 431, 1348, 1823, 1752, 1291, 864, 451, 1695, 693, 1044, 4, 384, 202, 776, 1304, 416, 1504, 1769, 1428, 765, 1635, 1240]. **Coupling** [377, 1130, 1857, 427]. **course** [1519]. **Covariant** [64, 686, 494, 1164, 1152]. **CP** [489]. **CPn** [513]. **cradle** [1123]. **Creation** [296, 1682]. **criteria** [552, 798, 837, 1066, 105, 55, 1832, 1559, 1732]. **criterion** [575, 842, 1633, 1422, 1425, 779]. **Critical** [1872, 1304, 828, 579, 653, 822, 840, 1244, 1650, 413, 490, 1823, 575, 1657, 116, 1810, 386, 610, 1766, 814, 1733, 1236, 1171, 414, 861, 957, 160, 813, 1347, 1771, 1007, 1672, 1208, 658, 201, 817, 167, 16, 314, 750, 976, 1087, 120, 1204, 418, 1105, 909, 1173, 1430]. **criticality** [174]. **cross** [84]. **cross-Kerr** [84]. **Crossing** [1111]. **crossings** [1688, 1644, 111]. **crystal** [992, 1066, 1139, 711, 1343, 1294, 23]. **crystalline** [265]. **crystallization** [1774]. **crystals** [1805, 73, 339, 1563, 1255]. **Cubic** [1322, 1052, 409, 431, 356, 549, 660, 1540, 1615, 1247, 1697]. **cubic-quintic** [1697]. **Cucker** [702, 853, 1121, 890, 1713, 451]. **curl** [1492]. **current** [792]. **currents** [283, 1873, 680, 1480, 1714, 1486]. **curvature** [1710, 1211, 372, 1549, 1360, 102, 1691]. **curved** [592, 966, 102, 1049]. **curves** [213, 1706]. **cut** [1052, 1267, 1578]. **cut-and-join** [1578]. **cutoffs** [556]. **cuts** [744]. **Cwikel** [987]. **cycles** [34, 1831, 522]. **cycloacene** [589]. **cylinder** [356]. **Cylindrical** [1456, 1357, 1402, 1438, 1118].

D [1701, 1625, 639, 276, 619, 604, 355, 321, 459, 838, 575, 229, 43, 726, 255, 236, 837, 743, 160, 615, 302, 63, 307, 122, 671, 884, 677, 975, 366, 61, 21, 871, 839, 775, 354, 639]. **D-modules** [1701]. **d-P** [639, 639]. **Daele** [1450]. **damped** [1528, 1010, 1342, 1674, 419, 633, 1429]. **damping** [1805, 474, 1172, 156, 59, 537, 1245, 237, 184, 1280, 306, 141, 158, 922, 1465, 200, 1308, 452]. **Darboux** [1195, 93, 1752, 1561, 972, 266, 79, 716]. **Darcy** [1044]. **dark** [675, 581, 536]. **Darken** [681]. **Darmois** [66]. **data** [1008, 1601, 1853, 900, 762, 660, 1427, 1730, 1376, 941, 1884, 1711, 737, 1209, 1213, 313, 1690, 1782, 1256, 122, 1005, 1564, 839, 1340, 325, 1623, 937, 988].

data-driven [1601]. **data-processing** [1005]. **Davey** [842]. **death** [1054].
Decay [517, 600, 1139, 160, 275, 237, 1885, 1080, 89, 719, 1528, 1544, 59, 19, 612, 1467, 615, 977, 1607, 1405, 1803, 616, 1630, 1379, 1146, 1012, 1210, 1465, 1569, 1615, 540, 871, 200, 614]. **decaying** [919, 1703, 1249, 464]. **decimation** [1014]. **Decimations** [1288, 967]. **decoders** [623]. **Decomposable** [745].
Decomposition [215, 1036, 1864, 424, 717]. **Decompositions** [96, 757, 1868]. **decoupling** [1224]. **deep** [1059]. **defect** [1060]. **defects** [287, 194, 1051]. **deficiency** [470]. **defined** [148, 1179, 424]. **Defining** [1865].
definite [191, 1285, 550]. **defocusing** [1528, 1623]. **Deformation** [763, 525, 260, 1433, 1522]. **deformations** [396, 1497, 1150, 999, 1287, 626, 157]. **Deformed** [756, 247, 526, 585, 186, 342, 280, 1149, 1277, 778, 529, 738]. **deformed-** [778]. **degeneracy** [701, 589, 1434, 1807]. **Degenerate** [1234, 1279, 1337, 234, 1414, 212, 61, 578, 942, 460]. **Degenerations** [62].
degree [1610, 822, 1798, 576, 1881, 1882]. **degrees** [1671, 1320]. **delay** [474, 156, 1878, 908, 1241, 202, 456, 1640, 1678, 1324, 704, 1325].
delay-difference [1241]. **delay-differential** [1241]. **Delayed** [1745, 40, 947, 1215]. **delayed-choice** [947]. **delays** [374, 1270, 1335, 1190, 677, 163, 1811, 1641, 471]. **Delta** [1248, 1565, 872, 1302]. **Delta-functional** [1565]. **Demazure** [781].
dendriform [1660]. **dense** [1194]. **densities** [902]. **Density** [438, 1816, 569, 420, 838, 1446, 663, 1139, 615, 891, 1645, 985, 383, 1775, 1072, 1677, 453, 671, 884, 550, 942, 1636, 1576]. **density-dependent** [838, 1139, 615, 891, 942, 1576]. **density-dependence** [420].
density-of-states [663]. **dependence** [330, 1350, 1051, 266, 839].
Dependent [1112, 244, 1827, 168, 477, 960, 147, 92, 838, 1172, 1139, 387, 97, 826, 865, 615, 1044, 891, 1245, 4, 323, 384, 1611, 1596, 1692, 1143, 1408, 79, 716, 849, 942, 1029, 824, 460, 532, 1576, 247, 738, 1319]. **depending** [420].
depolarizing [850]. **depth** [797]. **dequantizer** [322]. **Derivation** [1315, 454, 549, 1386, 880, 1179]. **derivative** [1482, 345, 545, 963, 1190, 703, 690, 622, 1445]. **derivatives** [1616].
Derkachov [1735]. **Derkachov-Manashov** [1735]. **Desargues** [292].
descent [858]. **description** [412, 548, 1328, 1108]. **detailed** [1737].
detailed-balance [1737]. **detect** [516]. **detection** [1825, 636]. **detectors** [1038]. **Determinant** [1333, 1407, 1523]. **determinants** [1350, 1581, 1065].
determining [666]. **Detonation** [1344]. **developed** [1309]. **development** [1135, 1031]. **deviation** [707]. **deviations** [597, 1040, 1280, 1366]. **diagonal** [745]. **diagonalizability** [31]. **diagonalization** [1093, 647]. **diamond** [1365, 223]. **Dickson** [979]. **dielectric** [1476]. **diffeomorphisms** [359].
difference [1230, 1407, 1389, 1241, 965]. **differences** [1074]. **Different** [1538, 808, 10, 1699, 1235, 1716]. **differentiability** [1852]. **differentiable** [754, 258]. **Differential** [1539, 1091, 1610, 1745, 333, 686, 751, 927, 494, 1878, 112, 434, 1109, 896, 1722, 119, 157, 132, 1241, 965, 621, 457, 450, 704, 1876, 1880, 807].

differential-difference [965]. **differential-subtraction** [621]. **diffracted** [1318]. **diffraction** [1787]. **diffuse** [1524]. **Diffusion** [773, 378, 91, 168, 946, 474, 234, 1297, 90, 387, 1872, 801, 1682, 1673, 710, 1495, 1467, 1018, 47, 44, 1640, 1259, 806, 1569, 1361, 1811, 1024, 636, 566, 1575, 873, 1027, 1331]. **diffusions** [1618]. **diffusive** [1789, 1269, 1325]. **diffusivity** [905]. **Digital** [349]. **Dijkgraaf** [1111]. **dilation** [1544, 253]. **Dilations** [364]. **Dilute** [1021, 1088, 170]. **dimension** [220, 286, 1154, 696, 1275, 1417, 546, 554, 96]. **Dimensional** [924, 213, 1739, 676, 860, 1816, 1033, 946, 1227, 1078, 912, 1591, 887, 182, 1855, 526, 1288, 967, 1136, 1411, 667, 1291, 1126, 255, 429, 883, 328, 629, 493, 795, 124, 105, 104, 508, 1708, 1002, 1597, 82, 458, 1245, 1493, 598, 1704, 1834, 170, 1703, 1845, 1692, 194, 432, 1292, 400, 316, 1228, 22, 1167, 1814, 416, 365, 819, 1295, 1420, 1012, 1102, 1802, 460, 1799, 1844, 869, 480, 939, 435, 315, 1024, 452, 1303, 614, 23, 1356, 1868]. **dimensions** [1371, 993, 1223, 317, 950, 1440, 567, 655, 1266, 258, 1168, 710, 454, 313, 393, 1316, 1419, 1205, 380, 1514, 519]. **dimer** [1885]. **Dirac** [448, 1293, 56, 251, 917, 665, 415, 24, 872, 1398, 895, 1062, 1346, 1351, 1815, 1355, 413, 833, 1848, 25, 289, 691, 1266, 1017, 1226, 1779, 1313, 1250, 186, 342, 442, 441, 1592, 1553, 1678, 1658, 86]. **Dirac-positive** [1779]. **Direct** [1658, 1122, 584, 664, 735]. **direct-sum** [584]. **Directional** [1193, 1877, 649]. **directions** [1670]. **Dirichlet** [1543, 91, 1001, 48, 109, 1427, 1085, 583, 535, 310, 1303]. **Disappearance** [757]. **discontinuity** [253]. **discontinuous** [355, 658]. **Discrete** [720, 792, 444, 759, 627, 426, 1777, 1449, 853, 1415, 1585, 1433, 1739, 783, 1481, 1363, 344, 346, 954, 1288, 341, 156, 1791, 1073, 1126, 378, 795, 1226, 1293, 929, 884, 1054, 141, 632, 1423]. **discrete-time** [1126]. **discretization** [1785, 961]. **discretizations** [233]. **discretized** [739]. **discussion** [373]. **disformal** [1320]. **disk** [1339, 792, 64]. **dislocations** [112]. **disordered** [687, 799, 224, 671, 1502]. **dispersal** [908, 163]. **Dispersion** [9, 835, 659, 341, 1879, 1726, 1595, 158, 235, 199]. **Dispersive** [810, 1855, 1796, 1240]. **dissipation** [1251, 1188, 1142, 612, 1731, 1175, 1700, 1652, 1204, 199]. **dissipative** [1851, 388, 421, 1676, 588, 1536, 436, 855]. **distance** [1268, 892, 1321, 1181]. **distortion** [635]. **distributed** [1700, 163, 1641]. **distribution** [242, 637, 1683, 1059, 245, 262, 1592, 787, 1636]. **distributional** [1201]. **distributions** [1232, 1289, 1836, 1750, 1458, 625, 1118]. **disturbance** [1302]. **disturbances** [207]. **disturbed** [1197]. **divergence** [746, 1709, 1443, 1753, 1082, 1487, 1005, 1296]. **divergence-free** [1443, 1753]. **divisibility** [552]. **division** [1661, 1662, 1755]. **divisors** [375]. **DKP** [1015]. **Do** [516, 1219]. **domain** [1298, 1617, 1524, 809, 275, 21, 769, 775, 1478, 161]. **domains** [872, 420, 1573, 1528, 473, 539, 1840, 1376, 488, 374, 406, 1516, 1492, 222, 750, 1343, 460, 590]. **Domar** [617]. **dominates** [506, 607]. **donor** [212]. **donor-acceptor** [212]. **Doob** [1666]. **Double** [1418, 187, 1643, 592, 963, 1562, 1514, 1602, 1547, 29, 1401, 1571, 1137, 1427, 1884, 277, 50, 410, 1070, 1353, 662, 158, 976, 1058]. **double-confluent** [1058].

Double-exponential [1643]. **Double-graded** [187]. **double-phase** [1137].
Doubled [50, 512, 410]. **doubles** [128]. **doubling** [822]. **doubly** [868, 1309].
drainage [1800, 1801]. **dressings** [765]. **drift** [168]. **drifting** [305]. **driven**
 [1601, 1439, 973, 823, 37, 1128, 1555, 1215, 1566, 1027]. **drop** [1248, 1469].
droplet [1628]. **drums** [1048]. **dS** [1084, 1552, 150]. **dual**
 [709, 1006, 1656, 489, 95, 657, 129, 1353, 1466, 622, 1852]. **dual-phase-lag**
 [1852]. **dualities** [240]. **duality** [1334, 1776, 880, 1743, 589, 125, 366, 1091].
dually [805]. **Dubrovnik** [1183, 1447, 1604]. **Dubrovnik-Frobenius** [1604].
due [475, 332]. **Duffing** [1185]. **Dullin** [206, 1828]. **Dunkl** [966, 1845].
dusty [520]. **Dym** [1721]. **Dynamic** [144, 1503, 1599, 1641, 856, 645, 994].
Dynamical [1472, 826, 865, 546, 889, 1215, 1606, 1224, 1590, 1010, 336, 1040,
 45, 1083, 104, 1794, 1322, 400, 1831, 1190, 703, 221]. **Dynamics**
 [1187, 142, 549, 692, 1044, 699, 1747, 1516, 1555, 582, 532, 1567, 619, 1096,
 1279, 1337, 1088, 1020, 1000, 41, 890, 1362, 1424, 675, 548, 1496, 156, 69, 951,
 600, 1251, 559, 40, 596, 1517, 1786, 530, 1079, 768, 1637, 1651, 242, 426, 1515,
 933, 1419, 1112, 1053, 427, 1790, 1377, 1009, 1638, 755, 1327, 775, 1429, 855].
Dyson [1624, 1643, 127, 687, 799, 861, 1419, 1886].

E6 [508]. **earth** [279, 1181]. **eddy** [1442]. **Edge**
 [112, 1873, 183, 709, 178, 1351, 1258, 1455]. **edged** [1471]. **Effect**
 [797, 1805, 860, 273, 681, 537, 847, 818, 760, 203, 484, 841, 1806, 1606].
Effective
 [1481, 1096, 1673, 523, 518, 1429, 542, 1144, 1400, 1611, 1559, 247, 738].
Effects [1727, 504, 680, 1651, 996, 614]. **Efficient** [466]. **Efimov** [860].
Eigenfunctions [1858, 822, 727, 1607, 1618]. **eigenmodes** [312, 509].
eigenproblem [1667]. **eigenstates** [1133, 1076, 1526, 547]. **Eigenvalue**
 [1734, 282, 1834, 1059, 960, 1694, 1754, 637, 572, 1458, 779, 226]. **Eigenvalues**
 [53, 1250, 1249, 110, 147, 1193, 1085, 124, 987, 1133, 1076, 1179, 1869, 1058, 305].
eight [365]. **eight-dimensional** [365]. **eikonal** [1863]. **Einstein**
 [356, 371, 1129, 934, 1301, 1113, 492, 1549, 1712, 700, 628, 1466, 380, 1634,
 1633, 1553, 152, 315, 793]. **Einstein-massless** [1634]. **Ekman** [1442, 74].
elastic [59, 306, 456]. **elastodynamics** [1028]. **Electric**
 [1051, 1078, 73, 447, 401, 408, 7, 663]. **electrical** [475, 1481]. **electro** [1851].
electro-hydrodynamics [1851]. **Electrodynamics** [519, 678, 1614].
electromagnetic [403, 722, 604, 73, 69, 1787, 931]. **electromagnetism**
 [1830, 924]. **electron** [475, 1815, 1154, 1226, 1293, 212]. **electron-phonon**
 [475]. **electronic** [902]. **Electrostatic** [402, 145, 602]. **electroweak** [1400].
Elementary [1055, 1394]. **elements** [1579, 422]. **elephant** [892, 1286].
ellipses [753]. **Elliptic**
 [609, 1371, 1421, 118, 204, 1244, 1650, 20, 343, 1026, 617, 17, 658, 270, 1428, 976].
embedded [1084, 1167]. **Embedding** [257, 446, 794]. **embeddings**
 [1305, 794]. **Emergence** [1765, 251]. **Emergent** [702, 853, 103, 40, 596].
Émery [1360]. **emission** [944]. **encodes** [1321]. **end** [1268, 26]. **endpoint**
 [209]. **energies** [173, 26, 884, 857]. **Energy**

[1594, 43, 485, 612, 769, 264, 1827, 350, 1071, 1020, 990, 1023, 1815, 1669, 723, 1349, 1460, 414, 488, 932, 888, 957, 1491, 546, 170, 730, 1775, 648, 1072, 664, 1782, 130, 1814, 266, 79, 716, 1221, 1179, 556, 16]. **energy-conserving** [1460]. **energy-constrained** [1221]. **energy-dependence** [266]. **energy-dependent** [79, 716]. **engineered** [1004]. **Enhancement** [683]. **ensemble** [1371, 1052, 40, 742, 637, 1521]. **ensembles** [1036, 687, 682, 767, 1017, 985, 1012, 1869, 529]. **entails** [31]. **Entangled** [178, 1612, 947, 1318]. **Entanglement** [98, 784, 1628, 100, 1591, 980, 591]. **entity** [740]. **entrance** [1645]. **entries** [572]. **entropies** [1545, 802, 639, 744, 1184, 325]. **Entropy** [220, 1669, 1057, 1050, 1781, 597, 784, 1628, 379, 1263, 1003, 933, 453, 1366, 566]. **entropy-constrained** [1781]. **enveloping** [845]. **environment** [707, 1269]. **epidemic** [1785, 163, 1269]. **Equality** [1545, 325, 979, 294, 1005]. **equation** [1198, 1532, 491, 392, 1421, 24, 773, 499, 1166, 1639, 579, 653, 912, 1030, 1528, 115, 356, 273, 166, 539, 1342, 1855, 358, 762, 549, 1114, 1382, 1765, 1145, 916, 413, 490, 1496, 660, 292, 206, 1808, 198, 808, 111, 870, 1330, 1246, 1878, 121, 921, 9, 835, 1730, 81, 1314, 386, 655, 18, 777, 1756, 1689, 1266, 811, 1873, 501, 867, 114, 387, 576, 535, 973, 1598, 310, 795, 1839, 10, 414, 83, 1203, 1715, 861, 801, 1125, 1682, 160, 481, 1468, 1673, 1627, 303, 55, 291, 454, 612, 1144, 972, 1495, 1695, 1850, 58, 1720, 82, 654, 458, 813, 1213, 977, 1307]. **equation** [1431, 1771, 728, 47, 393, 119, 164, 404, 1536, 844, 1405, 721, 633, 316, 8, 1208, 963, 1747, 1655, 1680, 1562, 907, 307, 903, 130, 193, 1488, 153, 1253, 1167, 935, 1140, 268, 968, 961, 1476, 181, 770, 1769, 1800, 1801, 1201, 1724, 690, 5, 6, 787, 1705, 1091, 1565, 158, 16, 360, 518, 631, 815, 1283, 922, 1564, 1465, 1802, 1828, 531, 538, 824, 1087, 1615, 1807, 1727, 1009, 235, 120, 165, 725, 1721, 200, 1025, 1566, 347, 199, 418, 1105, 913, 1448, 1303, 1423, 1796, 1623, 1847, 1429, 778, 1697, 859, 1086, 1064, 1863, 1331, 1430]. **equation-Wigner** [787]. **equations** [1532, 1482, 1300, 1745, 395, 1574, 604, 118, 368, 1165, 1311, 719, 1000, 333, 1573, 1348, 1363, 1413, 1010, 1362, 1424, 376, 182, 473, 474, 1176, 1230, 954, 1298, 1407, 1883, 204, 1729, 233, 1346, 659, 234, 910, 93, 92, 751, 810, 584, 734, 1214, 1823, 927, 388, 838, 1172, 1297, 720, 1475, 1401, 833, 635, 1315, 809, 575, 482, 1657, 208, 229, 398, 687, 116, 1810, 1406, 1147, 112, 378, 1376, 236, 610, 837, 1698, 558, 733, 1188, 814, 758, 434, 812, 574, 715, 123, 1174, 1460, 1793, 357, 451, 1142, 657, 1206, 1439, 162, 485, 117, 1770, 1273, 487, 1207, 1531, 944, 1582, 20]. **equations** [737, 1063, 1468, 710, 343, 374, 352, 905, 1305, 1833, 1854, 1695, 232, 1467, 1625, 275, 823, 896, 1274, 891, 1245, 1558, 1722, 1699, 302, 1535, 237, 60, 1185, 1175, 911, 1170, 274, 26, 1241, 875, 184, 707, 419, 1384, 1550, 931, 486, 1248, 1280, 22, 1205, 453, 628, 1304, 266, 79, 817, 1652, 1696, 1341, 222, 1186, 573, 416, 262, 94, 677, 961, 469, 484, 975, 108, 1146, 272, 843, 522, 1633, 571, 141, 332, 61, 765, 578, 731, 750, 942, 976, 1029, 1555, 1422, 1616, 1832, 1725, 564, 450, 869, 540, 1361, 480, 632, 871, 1204, 1324, 704, 839, 1058, 1340, 1521, 1445, 1308, 769, 775, 536, 909, 1092]. **equations** [1654, 1723, 1876, 1635, 793, 614, 1381, 1880, 1296, 1575, 354, 1576, 807, 471, 873].

equatorial [1824]. **equilibria** [827, 402, 1049, 1492]. **Equilibrium** [1047, 858, 1191, 313, 435]. **Equivalence** [73, 941, 876]. **equivalent** [67]. **ergodic** [1508]. **Ergodicity** [1419, 1883]. **Ericksen** [1385]. **Erratum** [1337, 385, 197, 835, 1095, 54, 479, 1374, 1203, 1133, 1753, 1487, 80, 6, 8]. **error** [109]. **ES-BGK** [1871]. **Essential** [1034]. **estimate** [1307]. **Estimates** [305, 1528, 1268, 1182, 810, 987, 1691, 441, 1525, 871, 1375, 1380, 778]. **Estimating** [1258]. **Estimation** [1210, 219, 1004, 622]. **Euclidean** [1008, 395, 722, 685, 186, 180, 1167, 1492, 1394, 625, 1118]. **Euclidean-signature** [722]. **Euler** [80, 93, 734, 1172, 1494, 642, 1768, 123, 1063, 1468, 1305, 1597, 1275, 1245, 1248, 22, 453, 1492, 94, 12, 1100, 869, 1426, 769]. **Eulerian** [143]. **Evaluation** [1116]. **even** [887, 1389]. **even-dimensional** [887]. **Evolution** [1174, 1157, 84, 1078, 1363, 601, 561, 299, 1793, 1439, 627, 263, 374, 823, 1202, 875, 922, 281]. **evolutionary** [1324]. **Exact** [604, 1078, 638, 1191, 328, 1788, 393, 1645, 1480, 75, 1785, 748, 1655, 1458, 1308, 1697, 1319, 1311, 1402, 1438, 667, 416]. **Exactly** [1054, 1353, 1505, 1664]. **examples** [46, 1305]. **Exceptional** [701, 590, 1499, 1617, 1196, 1716]. **exchange** [1815, 771, 621]. **exchange-integration** [621]. **excitations** [1504]. **exclusion** [1126, 215, 193]. **exist** [980]. **Existence** [1060, 395, 579, 653, 991, 166, 474, 1176, 1883, 1602, 1650, 413, 208, 723, 1378, 1878, 1840, 921, 610, 1572, 864, 52, 1529, 104, 492, 1216, 1026, 1535, 164, 1536, 1443, 1753, 573, 724, 418, 491, 420, 1853, 1299, 906, 1104, 1693, 752, 726, 576, 451, 1686, 1850, 1651, 82, 458, 615, 1275, 977, 938, 1138, 100, 1143, 380, 1146, 61, 815, 1465, 1616, 1725, 21, 200, 1308, 354, 1806, 161, 1551]. **exothermically** [1494]. **exotic** [790]. **exotics** [493]. **expanded** [904]. **expanding** [1634, 1837]. **expansion** [986, 267, 168, 1088, 225, 459, 567, 179, 663, 476, 796, 556, 869]. **expansions** [1339, 1291, 1768, 443, 1778, 1278]. **experiment** [740, 947]. **Explicit** [46, 1405, 1457, 1448]. **Exploring** [1318, 180]. **exponent** [1657, 386, 1733, 1872, 813, 419, 1677, 1087]. **Exponential** [1528, 751, 1012, 1530, 579, 653, 1883, 1244, 1650, 1643, 1544, 1625, 615, 1128, 876, 817, 621, 1379, 314, 540, 1441]. **Exponentially** [3, 385, 864, 464]. **exponents** [204, 1602, 116, 688, 1771, 1253, 750, 976, 1876]. **Expressions** [1524, 1458]. **Extended** [42, 469, 808, 1243, 10, 662]. **extension** [191, 568, 430, 1622, 1163, 983, 793]. **extensions** [134, 1305, 1511, 129]. **extensivity** [802]. **exterior** [1528, 539, 515, 809, 275, 1712, 1343]. **external** [1279, 1337, 604, 810, 931, 955, 538, 873, 562, 923]. **extremal** [1193, 329, 140, 594]. **extremals** [570]. **Extreme** [1869]. **extrinsic** [1549].

Faber [428]. **facilitated** [1126]. **factor** [541, 1437]. **Factorization** [966, 528, 249, 1263]. **Factorized** [1879, 737]. **factors** [446, 1077]. **fading** [1747]. **falling** [261]. **Families** [1782, 190]. **family** [959, 29, 388, 338, 875, 1434, 199, 1541, 1697]. **Fano** [774, 169, 1749]. **fashion**

[666]. **fast** [858, 409, 184, 1280, 1249, 518, 1046, 1429]. **faster** [1814]. **feature** [1395]. **features** [717]. **Fermi** [56, 1048, 1595, 929, 1794, 1029]. **fermion** [254, 367, 1317]. **fermionic** [179, 1561, 1284, 443, 1243, 97]. **fermionization** [1743]. **fermions** [1096, 946, 1520, 1629, 334]. **ferrite** [768]. **ferromagnetic** [940]. **ferromagnetism** [1471]. **fertilization** [939]. **Feynman** [1626, 1259, 1705, 806]. **fiber** [644]. **Fibonacci** [1122]. **fibrations** [407]. **Fick** [681]. **fidelity** [1264]. **field** [264, 1326, 722, 1279, 1337, 1398, 708, 1591, 1348, 1622, 887, 172, 1552, 295, 69, 567, 1315, 11, 197, 205, 447, 408, 7, 951, 626, 1378, 246, 496, 210, 592, 1572, 1265, 1873, 952, 1332, 150, 224, 1164, 1101, 379, 934, 1301, 509, 894, 404, 1120, 50, 410, 936, 194, 931, 1613, 1758, 1629, 1680, 1248, 176, 1743, 1416, 335, 791, 1051, 1492, 1866, 1098, 1504, 1548, 1127, 1184, 1469, 86, 536, 1560, 793, 1356, 390]. **fields** [396, 1006, 1710, 604, 1078, 359, 634, 3, 385, 397, 1510, 1830, 691, 1788, 1163, 1456, 1865, 1007, 523, 955, 1443, 1753, 1592]. **Filippov** [62]. **filled** [1568]. **filling** [818, 1629]. **film** [1698]. **finding** [34]. **Finite** [946, 571, 1131, 213, 1117, 1148, 676, 569, 1224, 706, 1494, 1225, 1798, 1163, 1258, 207, 465, 1627, 77, 1666, 1523, 176, 1259, 1705, 926, 1844, 899]. **finite-dimensional** [213, 1844]. **Finite-part** [571]. **finite-time** [207, 1666]. **finitely** [258, 1080]. **Finsler** [952]. **First** [399, 1187, 333, 431, 1011, 339, 494, 103, 1694, 1754, 1456, 1322, 1443, 1753, 556, 221, 724, 228]. **first-order** [333, 431, 1011, 103, 1456]. **Fisher** [1646, 578]. **Fisher-type** [578]. **fission** [1469]. **FitzHugh** [1215, 689]. **Five** [433, 558, 508, 1235]. **Five-body** [433]. **five-manifolds** [558]. **fixed** [822, 1406, 864]. **fixing** [254]. **FKG** [224, 983]. **FKMM** [1412]. **flame** [1849]. **Flat** [1580, 1008, 1298, 329, 397, 1730, 647, 934, 279, 1777, 26, 432, 1292, 439, 519]. **flatness** [754, 950]. **flavor** [1875, 547]. **Flett** [965]. **flights** [638, 93]. **flip** [144]. **flip-annihilation** [144]. **Floating** [711]. **flock** [890]. **flocking** [890, 1713]. **flocks** [702, 1326]. **Floquet** [1518, 1791, 381]. **flow** [1153, 368, 1165, 459, 1768, 331, 263, 1057, 52, 797, 1063, 1250, 1044, 313, 1138, 1562, 391, 231, 417, 1102, 1638, 974, 1067, 1432]. **flows** [1567, 1647, 1099, 679, 1789, 992, 1494, 1442, 1066, 370, 230, 1597, 1493, 75, 44, 1492, 167, 1343, 1577, 23, 705, 1309]. **FLRW** [951, 481, 934, 1634, 1725, 1464]. **Fluctuations** [1016, 572, 406, 1688, 1644, 960, 638, 957, 1834, 1070, 828]. **fluid** [991, 1853, 514, 1254, 1568, 1057, 19, 1063, 1305, 75, 933, 456, 871, 925, 1804]. **fluids** [415, 1590, 1357, 1402, 1438, 1135, 1693, 600, 352, 615, 938, 1769, 1569, 21, 755, 1649]. **flux** [3, 385, 663, 319, 936, 377, 1866, 771, 1432]. **flux-limited** [771]. **fluxes** [355, 1309]. **foam** [1800, 1801]. **Fock** [1242, 1114, 1459, 1584, 240, 931, 697]. **focusing** [549, 1496, 1213, 153, 120, 1623]. **Fokas** [1448, 1423]. **Fokker** [1101, 1141, 486, 1379, 168, 1627]. **fold** [1231, 1638]. **fold-Hopf** [1231]. **folded** [683]. **foldings** [1387]. **foliating** [1492]. **foliations** [1839]. **folklore** [411]. **food** [1462]. **force** [1326, 827, 1341]. **forced** [182, 458]. **forces** [873, 562, 923]. **Forchheimer** [679, 52, 230]. **forcing** [1808, 82, 1303]. **forest**

[1091]. **form** [541, 1879, 1358, 256, 749, 1077, 1860, 1221, 859, 529]. **Formal** [1069, 41]. **formalism** [106, 527, 524, 322, 301, 365, 1856]. **formality** [146]. **Formation** [207, 1302]. **forms** [854, 634, 644, 401, 1812, 1084, 148, 1116]. **formula** [1089, 1333, 109, 642, 1626, 781, 739, 1648, 131]. **formulas** [113, 642, 1667, 1405, 621, 1705]. **formulation** [438, 790, 230, 546, 953, 628, 1759, 807]. **Formulations** [1331]. **Fornberg** [534]. **FORQ** [1064]. **Foundations** [1004, 952]. **Four** [667, 598, 442, 1453, 931, 227, 1659]. **Four-body** [667]. **four-component** [1659]. **four-dimensional** [598]. **four-parameter** [931]. **four-sphere** [442]. **four-wave** [227]. **Fourier** [1609, 783, 649, 829]. **fourth** [754, 490, 654, 1307, 1620]. **fourth-order** [754, 490, 654, 1307, 1620]. **Fractional** [330, 964, 813, 779, 1300, 1745, 304, 1306, 579, 653, 474, 358, 204, 1145, 1650, 751, 500, 692, 208, 1378, 1878, 9, 835, 81, 386, 610, 1626, 1766, 1873, 387, 487, 20, 710, 545, 1491, 911, 730, 1570, 334, 153, 658, 1190, 222, 416, 703, 922, 1616, 978, 1807, 1727, 120, 1204, 1105, 1027]. **fractons** [790]. **fracture** [580]. **frame** [143, 1404]. **frames** [1639, 1225, 1740]. **framework** [213, 665, 543, 34, 167]. **Free** [264, 957, 1202, 946, 1815, 1172, 331, 1520, 1695, 170, 1443, 1753, 1814, 1800, 1801, 540, 1032, 718, 1067]. **freedom** [1610, 1671, 1320, 1881, 760, 1882]. **Freeman** [1624, 1886]. **Freezing** [379, 709, 1050]. **frequencies** [181, 1635]. **frequency** [1484, 1766, 1677]. **frierion** [916, 1252]. **Friedland** [772]. **Friedmann** [272]. **Friedrichs** [498]. **Frobenius** [46, 1183, 1447, 1604]. **Fröhlich** [320]. **front** [578]. **fronts** [911]. **frustration** [596]. **full** [575, 1854, 458, 1275, 1295, 1773]. **full-dimensional** [458]. **Fully** [1357, 1309, 1809, 57]. **function** [1415, 541, 754, 223, 706, 882, 45, 1236, 1, 479, 767, 343, 1202, 863, 1132, 1611, 1648, 32, 1636]. **functional** [1671, 1816, 179, 434, 1819, 1491, 1775, 664, 1825, 846, 1592, 1565]. **functionals** [1174, 1553, 1366]. **functions** [1117, 1415, 1585, 1370, 1745, 1365, 267, 118, 1579, 3, 385, 1333, 1764, 964, 1459, 1055, 443, 919, 159, 1332, 551, 462, 1004, 645, 1751, 983, 1685, 322, 466, 151, 211, 698, 958, 262, 441, 1648, 787, 1091, 571, 618, 1278, 899]. **fundamental** [1075, 1770]. **Further** [373]. **fusion** [1583]. **Future** [951, 1634, 1711, 793]. **Fuzzy** [1119, 930, 186, 342, 442].

galactic [1750]. **galaxies** [675]. **Galilean** [257, 694, 1032]. **Galilei** [1334]. **Galois** [1610, 132]. **galvanomagnetic** [1794]. **game** [1222]. **games** [708, 503, 1780]. **gap** [346, 1399, 879, 1390, 978]. **gapless** [1665]. **gapped** [1506, 1093, 319, 1156, 880, 1548]. **gaps** [1739, 276, 1085]. **gas** [1071, 1088, 1020, 1815, 1446, 1330, 299, 530, 1767, 1063, 313, 170, 1021, 1072, 22, 231, 167, 94, 1012, 1565, 1278, 460, 869, 775, 1489, 1432]. **gasdynamics** [520]. **gaseous** [123]. **gases** [230, 1019, 63, 1367, 49, 899]. **gaskets** [901]. **Gaudin** [348, 1149]. **Gaudin-type** [1149]. **Gauge** [1391, 663, 714, 760, 1710, 295, 254, 510, 1788, 30, 463, 591, 1865, 1549, 821, 50, 536]. **Gauge-invariant** [663]. **gauge/gravity** [591]. **Gauged** [186, 1104, 805, 1572, 574]. **Gauss** [370, 958, 1366]. **Gaussian** [984, 1242, 597, 1867, 1626, 742, 465, 379, 1050,

1820, 823, 1523, 697, 1233, 1458, 1521]. **gCH** [725]. **Gelfand** [739, 1201].
Gelfand-Yaglom [739]. **genera** [1743]. **General**
[1407, 94, 1482, 912, 1622, 661, 1254, 741, 90, 742, 28, 59, 288, 454, 1493, 122,
280, 1392, 968, 1462, 859, 1086, 1309]. **general-relativistic** [288].
Generalised [1646]. **Generalization** [131, 524, 186, 1831, 609].
Generalizations [804, 24, 1373]. **generalize** [214]. **Generalized**
[593, 1795, 548, 668, 1129, 159, 801, 1077, 1257, 129, 1485, 316, 782, 130, 506,
607, 266, 739, 1769, 1559, 1195, 1483, 1484, 719, 1078, 1815, 1396, 1798, 759, 842,
1211, 1332, 139, 576, 657, 52, 230, 1170, 77, 1570, 1549, 1470, 211, 334, 794, 1286,
252, 522, 158, 505, 1465, 1425, 1599, 1828, 531, 1131, 996, 1092, 1432, 1064].
generated [408, 805, 290, 1667, 77, 1080, 226]. **generates** [439]. **Generating**
[51, 1632, 620, 1820]. **generation** [177]. **generator** [1836]. **generators** [806].
Generic [437, 341, 717, 766]. **genuinely** [712]. **genus** [986, 46, 1131].
Geodesic [398]. **geodesics** [1509, 1605, 1826]. **Geometric**
[213, 1450, 580, 923, 504, 378, 1328, 370, 1211, 1865, 886, 1759, 1559, 1197, 1272].
geometrical [507, 457]. **geometrically** [1160]. **geometries**
[507, 1287, 595, 1783, 1360, 257]. **Geometry** [1822, 137, 1433, 430, 1359,
1218, 624, 1272, 1281, 318, 1094, 218, 512, 169, 852, 1779, 521, 1155, 684].
geophysical [755]. **geostropic** [1142]. **Gerdjikov** [1884, 963]. **Geroch** [700].
gFQXL [725]. **gFQXL/gCH** [725]. **ghost** [1163]. **Gibbs** [1639, 1180].
Gibbsian [766]. **Ginibre** [1371, 1193]. **Ginsparg** [186, 342]. **Ginzburg**
[473, 954, 358, 169, 973, 1637, 846, 222, 538, 632, 1697]. **Girsanov** [1282].
given [898]. **GJS** [241]. **glass** [264, 984]. **glasses** [1663]. **Glauber**
[1337, 1279]. **Global** [528, 91, 1851, 420, 1573, 1853, 1299, 906, 1114, 1136,
752, 660, 777, 1809, 512, 576, 451, 162, 905, 1209, 1651, 1597, 1467, 1625, 57,
615, 1275, 977, 908, 1493, 938, 1712, 1692, 533, 1143, 794, 1379, 1146, 61, 578,
868, 942, 1465, 1343, 1725, 460, 1799, 21, 1462, 871, 200, 1340, 1025, 452, 155,
199, 1310, 1723, 1804, 1464, 841, 354, 1576, 161, 1371, 491, 1760, 726, 1600,
104, 509, 1443, 1753, 975, 939, 1638, 1308, 1649]. **Global-in-time** [1114].
Globally [728, 516, 1590, 1164, 894, 1536]. **Glogower** [668]. **go** [1181].
Godunov [933]. **going** [60]. **Golden** [560, 1041]. **Goldstone** [1875]. **Good**
[171, 1283]. **Gordon**
[931, 729, 1474, 604, 236, 328, 1625, 844, 316, 518, 582, 1732]. **Gottwald**
[206, 1828]. **governed** [123]. **GP** [587]. **GP-limit** [587]. **GR**
[1357, 1402, 1438]. **graded**
[134, 1151, 1619, 568, 1153, 187, 28, 650, 553, 1149]. **Gradient**
[1380, 858, 1815, 1066]. **grained** [281]. **graph** [1222, 67, 1333, 1835].
graphene [321, 1471, 724, 1377, 1580]. **graphite** [800]. **Graphs**
[899, 308, 1792, 1056, 1757, 223, 1867, 1857, 214, 1798, 1158, 553, 1696, 926].
Grassmann [407, 119]. **Grassmannian** [584].
Grassmannian-parameterized [584]. **Grassmannians** [1370, 461, 1515].
gravitating [1476]. **Gravitational** [1229, 257, 1104, 1403, 796, 71]. **gravity**
[1567, 1862, 673, 1513, 1622, 371, 1554, 1821, 792, 1164, 1226, 1293, 508, 591,
38, 1588, 748, 1228, 228]. **gravity-wave** [1567]. **Green** [479, 1459, 1, 1648].

Gregory [515]. **Gregory-Laflamme** [515]. **grids** [440]. **Griffiths** [1841].
Groeneveld [476]. **Gross** [1071, 990, 454]. **Grothendieck** [1856]. **Ground**
 [311, 1145, 1823, 496, 357, 1171, 105, 693, 1775, 1072, 1434, 152, 271, 1173, 1060,
 423, 1071, 1591, 1669, 236, 941, 1544, 657, 492, 164, 880, 664, 556, 314, 483, 909].
Group [1839, 1646, 251, 188, 1684, 719, 1622, 634, 525, 1475, 1539, 743, 1095,
 468, 1178, 463, 1783, 821, 700, 1212, 1604, 1454, 1092]. **group-quasialgebras**
 [1092]. **groups**
 [1499, 217, 154, 946, 126, 1539, 1225, 349, 1776, 1158, 1404, 1596, 931, 1238].
growing [1496]. **Growth**
 [1128, 304, 1827, 579, 653, 1244, 1650, 1643, 1378, 1810, 1137, 610, 814, 1171,
 232, 394, 817, 843, 16, 314, 418, 1105, 1441, 1173, 278]. **GUE** [1058]. **Guerra**
 [1819]. **guide** [1574]. **Guiding** [41]. **Gurevich** [581].

H1 [1536]. **Haag** [880]. **Hadamard** [1435, 1878, 894]. **Hahn** [149]. **hair**
 [14, 606]. **half**
 [1507, 1165, 1631, 1853, 811, 1873, 973, 690, 1678, 1658, 235, 1489, 1723].
half-infinite [1507]. **half-line** [811, 973, 235]. **half-plane** [1873]. **half-space**
 [1723]. **Hall** [1600, 1332, 485, 319, 1503, 88, 1652, 978, 89, 614].
Hall-magnetohydrodynamic [89]. **Hall-MHD** [1600, 1652]. **Hamilton**
 [106, 1166, 527, 42, 524, 404, 931, 1186, 923]. **Hamiltonian**
 [865, 1133, 1410, 665, 248, 1474, 1522, 761, 412, 661, 1552, 1414, 1244, 1650,
 498, 34, 246, 1013, 1675, 826, 320, 17, 1076, 553, 227, 1881, 684, 1234, 1565,
 1844, 1638, 1882, 1849]. **Hamiltonian-type** [1650]. **Hamiltonians**
 [259, 1093, 148, 820, 611, 381, 324, 133, 547, 590, 1220]. **hand** [333, 431, 1011].
Hankel [1034, 1065, 1523, 1527, 226]. **haptotaxis** [1136]. **hard** [1088, 58].
Hardy [1602, 386]. **Harish** [914]. **Harmonic** [1617, 1212, 110, 477, 84, 667,
 559, 805, 883, 1707, 258, 37, 4, 1549, 384, 1611, 1503, 796, 365, 849].
harmonics [470]. **Harris** [1375]. **Harris-type** [1375]. **Harry** [1721].
Hartree [1346, 1114, 1823, 737, 1584, 1727]. **Hartwig** [1646]. **Hasimoto**
 [1639]. **Hausdorff** [437]. **Hawking** [1260]. **Hayman** [772]. **Hearing** [1593].
Heat [1821, 391, 619, 719, 991, 420, 1765, 600, 121, 9, 835, 608, 1144, 1558,
 938, 74, 377, 167, 1102, 942, 460, 1445, 354, 23]. **heat-bath** [619].
heat-conducting [991, 608]. **heat-conductive** [938, 167].
heat-conductivity [420, 942]. **heated** [1364]. **Hecke** [1106]. **Heegaard**
 [366]. **Hegerfeldt** [351, 2]. **Heiles** [1674]. **Heineman** [904]. **Heisenberg**
 [541, 297, 1684, 878, 545, 129, 1485, 1289, 1212, 662, 778]. **Heisenberg-type**
 [297]. **helicity** [1840, 760, 1140, 925]. **helicity-A** [925]. **helium** [377].
Helmholtz [797, 1201]. **Hénon** [1347, 1674]. **Herglotz**
 [330, 1786, 1557, 1679]. **Herglotz-type** [1786]. **Hermite**
 [1795, 526, 1764, 697, 334, 529]. **Hermite-like** [697]. **Hermitian**
 [970, 898, 248, 65, 225, 1506, 53, 1016, 596, 786, 133, 547, 1285, 1356, 590].
Hermiticity [1260, 641, 31]. **Hessian** [521]. **Heun**
 [808, 392, 239, 713, 1055, 10, 266, 1058, 1521]. **Heun-type** [392]. **hexagonal**
 [409, 1774]. **Hiai** [1041]. **Hidden** [685, 589, 667, 1736]. **hierarchical**

[223, 1643, 1236]. **hierarchies** [1621, 462, 764, 1170]. **hierarchy** [412, 962, 1752, 1015, 1561, 159, 454, 1473, 1447, 684, 609, 1131, 718, 1239, 107, 1868]. **Higgs** [763, 1656, 1399, 1349, 1798, 30, 804, 1256, 1466]. **High** [45, 22, 986, 1446, 1168, 1495, 1775, 238, 181, 1580, 1423]. **high-genus** [986]. **high-low** [238]. **high-order** [1423]. **High-temperature** [45]. **Higher** [79, 570, 1371, 950, 1440, 182, 1407, 1382, 1475, 784, 995, 655, 678, 88, 1234, 235, 1796, 1847, 689, 859]. **Higher-order** [79, 1407, 1382, 1475, 995, 655, 678, 1847, 859]. **highly** [1806]. **Hilbert** [917, 81, 995, 1884, 979, 171, 1667, 1285, 1448, 1423, 1623, 1847]. **Hilfer** [1745, 1190, 703]. **Hill** [752]. **Hilliard** [1214, 1746, 1381]. **Hirota** [765]. **history** [491]. **Hitchin** [1525]. **Hitchin-Thorpe** [1525]. **HIV** [1323]. **Hochschild** [845]. **Hofstadter** [1776]. **Hohenberg** [291, 815]. **hole** [1824, 1474, 673, 1055, 691, 1825, 594, 449]. **hole-plasma** [1824]. **holes** [14, 606, 329, 874, 1228]. **Holevo** [622]. **Holm** [273, 1299, 1382, 206, 870, 1246, 340, 1689, 576, 55, 972, 728, 1536, 108, 1828, 1615, 165, 199, 1659]. **Holm-type** [340, 1659]. **Holomorphic** [88]. **holonomic** [599, 1679, 399]. **holonomy** [286]. **Hom** [695, 389, 998]. **hom-algebroids** [998]. **hom-Lie** [389]. **homogeneous** [1816, 431, 1011, 1591, 1554, 1414, 1124, 481, 293, 1783, 274, 748, 1680, 907, 1634]. **Homogenization** [415, 44]. **Homological** [513, 1749]. **Homology** [926, 72]. **Homology-changing** [926]. **homomorphism** [1222]. **Homotopy** [1738, 1401, 999, 513, 1749]. **honeycomb** [759]. **Honor** [1624, 1886]. **Hookean** [1028]. **Hopf** [1231, 494, 1477, 598, 125, 1092]. **Hopfield** [405]. **horizon** [1360]. **horizontal** [1142, 1467, 1731, 1652]. **Horowitz** [372]. **Hubbard** [380]. **human** [1090, 1374]. **Hurwitz** [51, 46, 1333, 1277]. **hybrid** [1287, 34]. **Hydrodynamic** [961, 415, 275, 1295, 1302]. **hydrodynamical** [531]. **hydrodynamics** [1851, 255, 1803]. **hydrogen** [288, 1836]. **hydrogenic** [496, 288]. **hydromagnetic** [1057]. **hydrostatic** [416]. **hyper** [365]. **hyper-Kähler** [365]. **Hyperbolic** [1550, 516, 993, 1861, 1268, 1459, 1760, 207, 1164, 1113, 894, 1558, 1511, 1515, 628, 1179, 238, 76, 1086]. **hyperbolicity** [528]. **hyperboloid** [702, 1326, 216, 103]. **hyperchaotic** [598]. **hypercontractivity** [850]. **hypercube** [1237]. **hypergeometric** [1415, 571]. **Hypergraph** [744]. **hypergraphs** [948]. **hyperinfectious** [1640]. **hypersurface** [1512]. **hypersurfaces** [1360]. **hypocoercivity** [1375]. **Hypoellipticity** [807]. **hysteresis** [1013].

i.i.d [1016]. **ice** [800, 1424]. **ideal** [1446, 485, 938, 1866, 1278]. **ideas** [617]. **identifying** [1369]. **identity** [1349]. **II** [1038, 1781, 719, 1757, 1402, 1288, 1281, 1546, 759, 170, 748, 1801, 366, 228, 1882]. **III** [396, 1198, 1058]. **III** [201, 993, 1376, 778]. **Ill-posedness** [201, 993, 778]. **ill-prepared** [1376]. **illposedness** [121]. **Images** [753, 1403]. **imaginary** [1449]. **immersed** [580]. **impedance** [523]. **implies** [555, 252]. **importance** [1618]. **Improved** [850, 63, 1525, 1832]. **impulse** [75]. **impulsive** [376, 751, 1808, 434, 1270]. **incidence** [163, 1269]. **inclusion** [38, 436]. **inclusions** [29, 1726, 1380].

incompatibility [1355]. **Incomplete** [77, 1502]. **Incompressible** [1376, 1028, 1100, 1590, 1853, 485, 1207, 1467, 1044, 1274, 75, 1692, 416, 1102, 1569, 452, 769]. **increasing** [138]. **indefinite** [1145, 814, 693, 484, 1464]. **independent** [572, 666]. **index** [1585, 1037, 856, 819, 1420, 1455, 778]. **indexed** [444, 149, 1449]. **indices** [1421, 1518, 423, 1258]. **indirect** [1143]. **induced** [565, 675, 551, 138]. **inelastic** [907]. **inequalities** [1211, 1264, 428, 1782]. **inequality** [740, 619, 772, 850, 1041, 1711, 983, 1525, 1005, 325]. **inertia** [893]. **infectious** [1325]. **Infeld** [1614]. **inference** [1004]. **Infinite** [500, 1415, 244, 308, 1507, 1364, 1370, 1792, 1033, 1813, 1062, 642, 59, 1708, 1335, 183, 1419, 1205, 353, 1327, 199, 1309]. **infinite-dimensional** [1708]. **infinite-rank** [1813]. **Infinitely** [487, 538, 980, 1529]. **infinitesimal** [806]. **infinity** [395, 992, 723, 1510, 218, 1120, 1007, 1672, 935, 793]. **inflation** [1473]. **inflaton** [106]. **inflow** [1854]. **influences** [1495]. **Information** [1845, 177, 1182, 742, 521, 215, 623, 1587, 1080, 1630, 550, 788]. **information-theoretic** [623]. **infrared** [1315]. **Ingham** [1646]. **Ingham-Siegel** [1646]. **Inhomogeneous** [776, 1496, 1068, 1207, 1274, 1304, 769, 566, 1296]. **initial** [1011, 1853, 762, 660, 969, 941, 1884, 207, 85, 1711, 737, 1209, 1213, 1141, 1782, 953, 122, 1564, 839, 1340, 1623, 1576]. **initial-boundary** [1853]. **initial-value** [1011, 953]. **insertions** [319]. **Instability** [1231, 515, 208, 797, 202]. **instanton** [342]. **insulated** [1380]. **insulators** [1383, 1338, 1717, 171, 1817, 1420]. **integer** [1388]. **integer-valued** [1388]. **Integrability** [854, 1884, 1855, 833, 42, 256, 804, 1674, 445]. **Integrable** [1178, 1241, 875, 1844, 1868, 1647, 1117, 1621, 412, 229, 1191, 1192, 1785, 227, 337, 1736, 1638, 1239, 1659]. **Integral** [1812, 322, 719, 964, 1867, 1055, 249, 1284, 1718, 189, 269, 1259, 450, 64]. **integral-partial** [450]. **integrals** [1646, 68, 179, 1322, 132, 931, 1443, 1753, 334, 399, 221, 1736, 806]. **Integrated** [569, 1357, 1677, 671, 884]. **Integration** [1483, 621, 571]. **integro** [434]. **integro-differential** [434]. **integrodifferential** [118]. **interacting** [1096, 1020, 447, 7, 319, 60, 176, 1420]. **interaction** [1567, 1507, 110, 549, 1643, 692, 1848, 105, 383, 1021, 1758, 1053, 1049]. **interactions** [984, 872, 84, 954, 1823, 40, 866, 282, 1818, 1637, 428, 300, 1072, 907, 1559]. **intercritical** [1296]. **interest** [33]. **interesting** [1233]. **interface** [91, 1800, 1801]. **Interior** [1266, 1357, 1402, 1438, 932, 888, 1428]. **Interior-boundary** [1266]. **interlacing** [1418]. **intermediate** [779]. **Intermittency** [754]. **Internal** [1225, 1480, 1714]. **internally** [1364]. **Interpolating** [334]. **interpolation** [1857]. **interpretation** [783, 145, 249]. **intersection** [672, 1445]. **intersections** [147, 139, 1683]. **interstellar** [299]. **intertwining** [783]. **interval** [1433, 1762, 1678]. **intrapulse** [1697]. **intricacy** [889]. **intrinsic** [218, 770]. **Introduction** [989, 955]. **invariance** [1391]. **Invariant**

[570, 259, 233, 1227, 683, 1608, 586, 1412, 429, 663, 767, 1439, 362, 508, 1673, 458, 823, 1596, 791, 1492, 1186, 1394, 1395, 625, 1118, 815, 582, 775, 1880].
invariants [213, 1512, 1056, 1387, 1291, 1156, 826, 865, 595, 1586, 1197].
invasion [1136, 1872, 1799]. **Inverse** [1760, 1818, 1678, 937, 988, 1601, 1730, 941, 387, 1658, 1620, 1721]. **inverted** [1289]. **invertible** [696]. **Investigation** [1052, 421, 1031]. **invicid** [938].
inviscid [1802, 1575]. **invisibility** [393]. **involving** [1306, 579, 653, 118, 355, 575, 1657, 1066, 814, 20, 119, 184, 658, 1425, 779].
ion [602, 614]. **ion-slip** [614]. **ions** [288]. **Irreducible** [1151, 1701, 568, 1148, 1081]. **isentropic** [520, 577, 1376, 812, 530, 1767, 230, 22, 231, 94, 770, 775]. **Ising** [541, 1591, 1288, 967, 224, 105, 300, 1758, 335]. **Ismail** [1687]. **isochrone** [825]. **ISOKANN** [1618]. **isolated** [363, 982]. **Isometric** [1719, 1305, 1586].
isometries [1492]. **Isomonodromic** [157, 1522]. **isospectral** [583].
isospectrality [1791]. **isothermal** [992, 838, 1577, 1381, 23]. **Isotropic** [461, 183]. **isotropy** [1404]. **Issue** [989]. **issues** [388]. **Itô** [1764]. **iteration** [195, 87, 196]. **iterative** [1093]. **Ito** [239]. **IV** [1438, 529]. **Ivanov** [1884, 963].
Izergin [151].

J [652, 1337, 1688, 653, 115, 385, 1755, 197, 195, 651, 447, 808, 970, 606, 448, 835, 1095, 54, 114, 1754, 196, 479, 1374, 1203, 1293, 865, 932, 1133, 384, 8, 1753, 607, 269, 1487, 80, 351, 6, 1336, 988]. **Jacobi** [106, 1166, 544, 527, 682, 834, 42, 444, 402, 404, 931, 1186, 1869, 923].
Jacobsthal [1233]. **jammer** [177]. **Jean** [989]. **jellium** [711]. **join** [1578].
Jona [1875]. **Jordan** [1199, 401, 561, 1565]. **jump** [1715].

Kac [962, 29, 339, 1626, 1259, 806]. **Kadomtsev** [1720, 1170, 903, 735].
Kagome [1130]. **Kähler** [1517, 365]. **Kaluza** [558, 631]. **KAM** [182, 1457].
Kantorovich [1181]. **Kato** [1802]. **Kaup** [1844, 1868, 1562, 1847, 859].
Kawai [1401]. **KdV** [1532, 795, 117, 1241, 235]. **Keller** [841]. **Kelvin** [635, 797]. **Kepler** [1002]. **kernel** [168, 719, 1821]. **kernels** [191, 1242, 1811].
Kerr [1293, 932, 84, 1226, 888, 1826, 86]. **Kertész** [1329]. **Keyfitz** [866].
Khovanov [72]. **Killing** [396, 256, 439]. **kind** [1685, 1716, 729]. **kinds** [980].
kinematics [1589]. **Kinetic** [1582, 1121, 673, 451, 338, 944, 1565, 925].
kinklike [1273]. **Kirchhoff** [1850, 539, 1023, 1602, 877, 1657, 1378, 357, 1529, 813, 1216, 1491, 1431, 1699, 1771, 730, 1570, 1488, 935, 484, 16, 483, 418, 1105, 909, 1173, 1027].
Kirchhoff-like [1431]. **Kirchhoff-type** [1023, 877, 813, 1216, 1488, 484, 16, 1173, 1027]. **Kirillov** [586]. **Kirkpatrick** [264]. **Kirkwood** [1355, 1779]. **Kitaev** [1547, 1192, 242]. **Klein** [1619, 1474, 604, 236, 558, 328, 1625, 844, 931, 316, 631, 729]. **klystrons** [1045]. **knots** [1387, 832]. **Knotted** [1056, 1757, 337]. **known** [392, 1595, 1019]. **Kontsevich** [1277]. **Koopman** [1618]. **Korepin** [151].
Korteweg [811, 1206, 352, 1854, 769, 1623]. **Korteweg-de** [811]. **KP**

[962, 136, 443, 462, 764, 1447, 1241, 609, 107]. **KPZ** [1520]. **Krahn** [428]. **Kramers** [1101]. **Kranzer** [866]. **Krawtchouk** [440, 1196]. **Krein** [820]. **Kretschmann** [1221]. **Kronecker** [343]. **Kropina** [1358]. **Kruskal** [768]. **KTAP** [893]. **Kudryashov** [1855]. **Kuiper** [1305]. **Kundt** [1227]. **Kuper** [340]. **Kuznetsov** [160].

labeling [1390]. **Lack** [798, 1852, 1306]. **Ladik** [961]. **Laflamme** [515]. **lag** [1852]. **Lagrange** [376, 524, 1185]. **Lagrangian** [1451, 855]. **Lagrangians** [1408, 228]. **Laguerre** [1065, 444, 637, 226]. **lake** [1030]. **lambda** [136]. **Lanczos** [1550]. **Landau** [473, 954, 358, 1351, 624, 1147, 169, 973, 1637, 1629, 307, 88, 846, 1140, 222, 538, 632, 1310, 1697]. **landscape** [1168]. **Langevin** [184, 707, 1280]. **Laplace** [1509, 814, 1084, 965, 1555, 1027]. **Laplacian** [653, 1754, 1530, 1306, 579, 346, 109, 116, 1718, 1694, 20, 1777, 603, 1516, 1253, 658, 935, 1025, 305, 841, 471]. **Laplacians** [1593]. **Large** [597, 1040, 1854, 1720, 1155, 707, 732, 1652, 1564, 1366, 1851, 225, 601, 53, 549, 1209, 1523, 1059, 1508, 1629, 506, 607, 1098, 167, 1210, 1343, 564, 354, 1576, 226]. **Large-scale** [1155]. **large-solutions** [1210]. **Large-time** [1854, 1720, 167]. **larger** [873]. **largest** [637, 1783]. **Lasinio** [1875]. **lateral** [771]. **Latin** [1354]. **lattice** [1187, 1198, 1370, 368, 409, 229, 741, 1399, 1875, 1243, 759, 795, 319, 696, 1156, 749, 1637, 1270, 1774, 1400, 985, 1131, 435, 1215, 1732, 1441]. **lattices** [292, 429, 443, 864, 362, 553, 582]. **Law** [1508, 403, 1609, 1300, 355, 233, 681, 1737, 712, 19, 1742, 1493, 1417, 478, 1864, 1852]. **law-preserving** [233]. **laws** [740, 1364, 1069, 720, 599, 316, 122, 869]. **Lax** [708, 1855, 1752, 1675, 758, 553, 185]. **layer** [459, 1339, 1768, 1442, 680]. **layers** [1102]. **leading** [685, 846]. **Learning** [1618, 1461, 1846]. **learning-assisted** [1461]. **Least** [1023, 488, 730, 16, 1372, 723, 1408]. **Lebesgue** [1034]. **Leblond** [24]. **lecture** [904]. **Lee** [498, 958]. **Leffler** [1745]. **Left** [686, 494, 1227]. **Left-covariant** [686, 494]. **Legendre** [267, 964, 1013, 1685]. **Leibniz** [507]. **Lemaître** [272]. **lemma** [586]. **Lenells** [1448, 1423]. **length** [280]. **lengths** [33]. **lenses** [1403]. **Lenz** [1509]. **Leslie** [1385]. **less** [1678]. **Leur** [962]. **Level** [883, 111, 408, 133, 1629, 1498, 176, 669, 1331]. **levels** [88]. **Levinson** [617]. **Levitan** [1201]. **Lévy** [24, 219, 1566]. **Lewellen** [1401]. **Lewis** [1291]. **Lichnerowicz** [921]. **Lie** [115, 114, 8, 6, 1619, 695, 495, 713, 1069, 1813, 1497, 736, 525, 1334, 1291, 28, 715, 650, 1386, 389, 1451, 1107, 1596, 782, 968, 1773, 5, 260, 1603]. **Lieb** [1874, 1545]. **Liénard** [115, 114, 404, 8, 5, 6]. **Lifespan** [1144, 906]. **Lifshitz** [1147, 307, 1228, 1140]. **Lifshitz-like** [1228]. **lift** [558]. **Light** [1166, 1094, 1552, 1412, 1524, 398, 630, 944, 1582]. **lightlike** [1670]. **like** [1509, 756, 440, 833, 214, 1884, 1431, 748, 1782, 1228, 697, 365, 1564, 1623]. **likelihood** [1004]. **Limit** [709, 336, 1478, 543, 1365, 773, 746, 1276, 172, 959, 1815, 339, 1040, 1376, 879, 842, 1206, 1063, 1468, 352, 313, 892, 1690, 1775, 1588, 936, 1831, 1508, 1629, 22, 1825, 122, 189, 269, 1696, 522, 1028, 1127, 1802, 1278, 1100, 390, 587].

limitations [364]. **limited** [771]. **Limiting** [1637, 1286, 285, 1324, 530, 94].
Limits [1432, 1121, 369, 1870, 1342, 734, 1767, 60, 231, 464]. **Lindblad** [669].
Lindbladians [1737]. **line** [1506, 1617, 1848, 1169, 1284, 1329, 811, 973, 263, 185, 1201, 690, 735, 1658, 235, 1796]. **line-gapped** [1506]. **Linear**
 [1424, 1230, 1619, 862, 440, 960, 552, 1407, 355, 233, 234, 1552, 799, 503, 236, 28, 627, 896, 588, 1185, 572, 1803, 776, 424, 484, 1527, 824, 1445, 1086].
linearities [870]. **linearity** [685]. **linearizability** [445]. **linearizable**
 [432, 1292]. **linearizations** [1538]. **Linearized** [123, 117, 58]. **linearly** [693].
lines [1372]. **link** [516]. **linked** [1500]. **Liouville**
 [1421, 887, 910, 482, 882, 1085, 1734, 1718, 1274, 891, 77, 656, 1762, 1049, 262].
Liouville-type [1274, 891, 1049, 262]. **Liouvillean** [1635]. **Lippmann** [393].
Lipschitz [441, 1654]. **liquid** [992, 339, 261, 1066, 1139, 231, 1343, 1469, 23].
liquid-gas [231]. **Littlewood** [386, 1332]. **Livsic** [1829]. **Livsic-type** [1829].
Local [1365, 1763, 577, 367, 812, 1156, 1653, 303, 55, 994, 1549, 1384, 1397, 1140, 505, 480, 1371, 1671, 1688, 1644, 98, 1180, 1737, 20, 291, 1317, 383, 1825, 1341, 1445, 793, 899, 1093]. **Locality** [68, 1053]. **localization**
 [287, 1760, 949, 727, 472, 1155, 1584, 1316, 1501, 1502, 351, 2, 1784, 901].
Localized [116, 733, 1842, 1369, 3, 385, 1251, 864]. **localizer** [1506]. **Locally**
 [1783, 766, 527, 1700]. **Locally-homogeneous** [1783]. **locus** [1267, 1386].
Loewner [263]. **Log** [669, 899]. **Log-convex** [669]. **log-Coulomb** [899].
logarithm [1300, 1307]. **logarithm-law** [1300]. **Logarithmic**
 [1205, 345, 619, 579, 653, 719, 1176, 1657, 1468, 1417, 1696, 573, 770, 622, 1025].
logistic [1018, 533, 868, 1462]. **loglog** [617]. **logrithmic** [1680]. **Lohe**
 [331, 40, 596]. **Long** [762, 234, 1496, 156, 1251, 848, 1283, 1240, 1115, 954, 741, 1236, 472, 576, 688, 105, 1637, 1417, 1731, 907, 33, 913]. **Long-range**
 [848, 954, 1236, 472, 688, 1637, 907, 33]. **Long-time**
 [762, 234, 156, 1251, 1283, 1240, 913]. **longitudinal** [541]. **loop**
 [557, 41, 126, 687, 1284]. **Lorentz** [969, 1531, 129]. **Lorentzian** [1042, 1863].
lossless [401]. **Lotka** [1335]. **Low** [993, 1594, 1020, 1411, 1718, 350, 990, 567, 104, 379, 546, 1072, 238, 1379, 1240, 975]. **Low-dimensional** [1411, 104].
Low-energy [1020, 546]. **Lower** [862, 357, 1796]. **Lowest** [493, 568].
Lowest-dimensional [493]. **Lucas** [1233, 958]. **LUE** [1527]. **lump** [1720].
lumped [659]. **lumps** [903]. **lunar** [1518, 752]. **Lyapunov** [1607, 1677, 1876].
lying [660].

M [1687, 1677]. **M5** [555]. **M5-branes** [555]. **MacDonald** [1761, 1377].
Mach [1206, 22]. **Machine** [1461]. **MacMahon** [915]. **macrostructures**
 [1789]. **Magic** [1354, 364, 1219, 724]. **Magnetic**
 [309, 497, 1486, 438, 1279, 1337, 174, 854, 1078, 1145, 3, 385, 73, 780, 1297, 11, 197, 447, 798, 7, 1378, 246, 496, 210, 610, 663, 1873, 867, 1778, 1101, 1456, 1200, 1467, 1232, 1777, 936, 1629, 1680, 1248, 1866, 375, 538, 1569, 1575, 1027, 1606].
magnetized [321]. **magneto** [205, 275, 1569, 21, 871].
magneto-hydrodynamic [275]. **magneto-micropolar** [1569, 21, 871].
magnetogasdynamics [936]. **magnetohydrodynamic**

[809, 482, 1376, 302, 1690, 1210, 942, 89, 480, 1478].
magnetohydrodynamics [1339, 19, 656]. **magnetostatics** [760]. **Maillet** [268]. **Majorana** [213]. **managed** [659]. **Manashov** [1735]. **Manifold** [821, 41, 198, 1571, 1068, 580, 550, 1604]. **manifolds** [853, 395, 1410, 761, 219, 1042, 46, 527, 42, 558, 1211, 169, 1439, 852, 1250, 823, 1183, 1447, 26, 1691, 1324, 1880]. **Manin** [78]. **manipulation** [98].
many [757, 214, 980, 487, 1529, 538, 1559]. **many-body** [1559]. **map** [1724].
Mapping [641, 392]. **maps** [461, 822, 552, 906, 292, 805, 468, 373, 745, 138, 1046]. **Marchenko** [1482, 1201]. **Marginal** [719, 740, 1181]. **marginally** [1711]. **Markov** [1282, 1409, 1715, 300, 184, 1366]. **Markovian** [552, 1280, 427]. **martingales** [613]. **Maryland** [647]. **Maryland-type** [647]. **maser** [1040]. **Mass** [1399, 56, 244, 216, 1062, 1268, 1859, 490, 1823, 397, 630, 370, 1711, 1511, 1611, 1488, 1127, 247, 738, 1319]. **mass-critical** [490]. **mass-quasilocal** [1711]. **masses** [827, 1596, 1235, 294]. **Massive** [150, 541, 1821, 1563, 885, 1860, 228]. **massless** [951, 150, 645, 481, 1634, 1658, 347]. **massless-scalar** [951]. **master** [378, 83, 1203, 1682, 1331]. **materials** [1816]. **Math** [652, 1337, 1688, 653, 115, 385, 1755, 197, 195, 651, 447, 808, 970, 606, 448, 835, 1095, 54, 114, 1754, 196, 479, 1374, 1203, 1293, 865, 932, 1133, 384, 8, 1753, 607, 269, 1487, 80, 351, 6, 1336, 988]. **Mathematical** [952, 1090, 1374, 438, 904, 455]. **Mathematics** [243, 298]. **Mathieu** [560, 1014, 633, 1537, 1772]. **Mathieu-type** [1014]. **matrices** [1738, 188, 1052, 640, 960, 1435, 53, 544, 1016, 1843, 561, 1350, 1581, 1546, 712, 749, 1159, 572, 985, 1238, 1059, 1864, 646, 717, 550, 1527, 1869, 226, 96, 1735].
Matrix [1579, 1630, 709, 766, 878, 225, 1036, 898, 542, 799, 682, 1154, 1312, 40, 1168, 1177, 394, 1485, 609, 1149, 803, 779, 590]. **matter** [174, 1111, 359, 1391, 581, 449, 1220]. **max** [1831]. **max-plus** [1831].
maximal [1085]. **Maximally** [432, 1612]. **maximisation** [1840]. **Maximum** [622]. **Maxwell** [835, 995, 1466, 172, 1104, 1315, 408, 9, 1830, 1460, 487, 1531, 1120, 209, 729].
Maxwell-scalar [1120]. **mCH** [725]. **MDS** [1160]. **Mean** [1608, 1567, 708, 172, 560, 379, 985, 1480, 1714, 1549, 1758, 1504, 1127, 1514, 390]. **mean-field** [379, 1758, 1504, 390]. **Measure** [907, 1639, 882, 896, 1592, 1237, 305, 1876].
measurement [83, 1203, 252]. **measurements** [1524, 425, 554, 327].
measures [1609, 437, 43, 99, 551, 265, 1673, 1270, 1845, 1587, 625, 1118, 815, 582, 788, 1478]. **mechanic** [739]. **mechanical** [1596, 666, 1394, 1395, 562].
mechanics [1194, 134, 1452, 563, 1605, 1000, 187, 1601, 500, 1075, 1272, 1281, 642, 1519, 981, 1706, 599, 1526, 1449, 1762, 825, 391, 337, 1759, 788, 1556, 828, 247, 738].
mechanism [635, 1143, 452]. **Meckler** [1073]. **media** [679, 1094, 1726, 52, 944, 1582, 580, 306, 1476, 1849]. **medium** [93, 408, 1024].
meet [1859]. **Mehler** [1459]. **Meixner** [149]. **meltings** [1294]. **memories** [1194]. **memory** [1342, 336, 989, 1090, 1374, 59, 1747, 1361]. **Mermin** [1073].

Merola [1131]. **Meromorphy** [927]. **mesoscopic** [1365]. **Message** [177].
messages [101]. **metals** [1794]. **Metastability** [1279, 1337, 565].
metastable [1013]. **method** [1195, 1482, 722, 154, 195, 808, 1571, 87, 196,
 1460, 918, 10, 1720, 35, 1825, 794, 238, 621, 765, 455]. **methods**
 [409, 825, 1849]. **Metric**
 [507, 1513, 1094, 97, 521, 373, 1285, 1740, 439, 365, 305, 594]. **metric-affine**
 [1513]. **Metric-connection** [507]. **metricity** [1862]. **Metrics**
 [372, 1008, 898, 1129, 138]. **metrizability** [1358]. **metrology** [425]. **MHD**
 [420, 1298, 459, 1297, 577, 837, 1600, 1188, 1385, 485, 1207, 1467, 1492, 1866,
 1652, 677, 731, 1425, 1832, 839, 1723, 614, 1575]. **micropolar**
 [1693, 615, 1731, 1569, 21, 871, 1649]. **microscopic** [1583]. **MICZ** [1002].
Mills [1349, 570, 1006, 1134, 1068, 1549, 1712, 594]. **min** [744]. **min-cuts**
 [744]. **Mini** [1519]. **Mini-course** [1519]. **minimal** [52, 650, 1511, 1360, 280].
Minimally [1292]. **minimizers** [1491]. **Minkowski**
 [1744, 367, 969, 1510, 1290, 1712]. **mirror** [513, 1749]. **Mittag** [1745]. **Mixed**
 [96, 830, 762, 680, 230, 1175, 1428]. **Mixing** [949, 1061, 676, 373, 227, 636].
mixture [737]. **mixtures** [991, 1251, 1767]. **MKDV** [1564, 1213, 913].
mobile [1051]. **Möbius** [589]. **MOCH** [728]. **Mode** [111, 465]. **Model**
 [1031, 264, 405, 853, 1121, 971, 1761, 430, 1279, 1337, 1688, 1644, 91, 1089, 991,
 1591, 1656, 1229, 489, 1104, 1547, 1136, 897, 1643, 205, 286, 408, 1628, 329, 284,
 1399, 1875, 331, 103, 596, 663, 1572, 1626, 1329, 1798, 956, 1884, 1192, 1767,
 451, 1872, 338, 105, 379, 463, 945, 957, 348, 1252, 1651, 1018, 908, 1323, 242,
 394, 994, 1373, 300, 1611, 966, 1758, 1419, 580, 953, 609, 1885, 732, 1143, 122,
 1049, 56, 671, 884, 581, 1458, 201, 1217, 231, 1466, 1871, 1640, 380, 770, 1345,
 556, 1769, 1736, 1277, 868, 1302, 724, 1636, 1559, 1189, 163, 1269, 1799, 89].
model [1469, 1462, 1728, 1024, 452, 1489, 1432, 1325, 1806, 1849, 1108].
Modeling [706, 1851, 1461, 1330, 939]. **Models**
 [1790, 1567, 1418, 1647, 106, 709, 528, 1816, 722, 1199, 1513, 1870, 893, 225,
 1344, 1713, 1288, 967, 507, 1282, 567, 90, 1520, 224, 1090, 1374, 1529, 1748,
 104, 1050, 1077, 1485, 1785, 748, 335, 1149, 857, 366, 828, 1583]. **Moderate**
 [1280]. **modes** [600, 1875, 874, 313, 755]. **modification** [675]. **Modified**
 [1513, 1015, 655, 619, 713, 1590, 273, 962, 790, 1561, 1689, 1211, 530, 1063,
 291, 972, 728, 1860, 94, 1283, 1615, 1623]. **modular** [1706]. **modularity**
 [287]. **modules**
 [568, 1148, 495, 1033, 1701, 140, 1812, 171, 914, 1500, 1498, 1032, 1603].
moduli [763, 1386]. **modulus** [1677]. **moisture** [856]. **molecular**
 [683, 1282, 1331]. **molecule** [1507]. **molecules** [902, 955, 1871]. **moment**
 [447, 7]. **Moments** [345, 640, 682, 1417]. **Momentum** [897, 1711, 1704, 424].
Monodromy [1675, 1538, 955]. **monoids** [220]. **monomer** [1885].
monomer-dimer [1885]. **monopole** [536]. **monopoles** [900, 1232, 594].
monotone [1774, 138]. **Monotonicity** [536, 1041, 1329, 1545]. **Morato**
 [1819]. **Mori** [807]. **Morse** [1421, 756, 513, 1749]. **Morse-like** [756]. **Moser**
 [609, 107]. **most** [1394, 1395]. **motility** [1143, 532]. **motion**
 [91, 41, 358, 312, 1568, 663, 1232, 931, 1804, 562]. **motions** [1305, 931].

Mountain [1466]. **Moutard** [296]. **Moutard-type** [296]. **movement** [581].
mover [1181]. **moves** [1056, 1757]. **moving** [1362, 447, 7, 1655]. **Moyal**
 [787]. **Multi**
 [1567, 1348, 526, 313, 1532, 154, 225, 92, 964, 1461, 1875, 883, 444, 387, 764,
 1216, 1493, 1704, 1384, 149, 1449, 1677, 1555, 1828, 538, 735, 939, 582, 1868].
multi-bump [1216]. **multi-component** [1532, 764, 1868].
Multi-dimensional [526, 883, 1493, 1704, 939]. **multi-dimensions** [313].
multi-frequency [1677]. **multi-indexed** [444, 149, 1449]. **multi-integral**
 [964]. **multi-matrix** [225]. **multi-parameter** [154]. **Multi-peak**
 [1348, 1384]. **multi-peakons** [1828]. **Multi-scale** [1567, 313, 1461].
multi-soliton [92]. **multi-stochastic** [582]. **multi-term** [387].
multi-valued [1555]. **multi-vortex** [538]. **multicavity** [1045]. **multiform**
 [412]. **multifractal** [1642]. **Multigraded** [127]. **multilayer** [1580].
multimonopole [1311]. **Multiparameter** [425, 1239]. **Multiparticle** [1612].
multipartite [747]. **Multiplane** [1403]. **Multiple**
 [386, 1766, 1733, 1629, 1428, 824, 263, 313, 1190, 859]. **multiplication**
 [188, 478]. **multiplicative** [973, 1263, 1673, 291, 815, 1727, 1880].
Multiplicity [20, 277, 1696, 1105, 395, 579, 653, 840, 1602, 877, 610, 573].
multipliers [1518]. **Multipole** [14, 606]. **multiscale** [219, 1746].
multisymplectic [852]. **Multivariate** [1264, 1579]. **Multivortex** [1724].
mutations [445]. **mutual** [1682, 215, 1080, 1630]. **Myers** [372].

n [983, 345, 1701, 317]. **Nagumo** [1215, 689]. **Nahm** [1311, 900]. **Nambu**
 [1440, 1875]. **nanosystems** [1051]. **Nash** [1305]. **naturally** [1862]. **Navier**
 [1426, 1573, 1362, 1214, 838, 1401, 575, 261, 812, 1206, 303, 352, 1854, 1044,
 1274, 891, 1558, 237, 60, 486, 1341, 1379, 1146, 1802, 779, 1009, 939, 1204,
 1340, 1310, 1654, 1381, 532, 354, 1576, 161]. **Navier-type** [1573]. **near**
 [1008, 1099, 1120, 1360, 1838]. **nearly** [761]. **Necessary** [552, 1732].
Negative [1647, 1279, 1337, 1427, 124, 1653, 372, 987]. **Nehari** [311, 1571].
Nehari-Pohozaev [311]. **Nematic** [339, 992, 1343, 23]. **Nested** [1492].
network [1130, 1481, 40, 663]. **networks** [1270, 1059]. **Neumann**
 [1543, 830, 48, 811, 1709, 603, 1486, 1464]. **neural** [1270, 1059]. **neutral**
 [1348, 1363, 751, 434, 721, 1318, 704]. **Newell** [1844, 1868, 1562, 1847, 859].
Newman [1293, 397, 1226]. **Newton** [526, 1123, 314]. **Newtonian**
 [827, 1590, 1853, 675, 1254, 1327]. **Next** [1815, 846]. **Next-order** [1815].
next-to-leading [846]. **Nijenhuis** [1177]. **Nikiforov** [808, 10]. **Nil** [396].
Nil-Killing [396]. **nine** [1002]. **nine-dimensional** [1002]. **Nishimori** [1169].
Nizhnik [1842]. **NLS** [549, 692, 726, 941, 238]. **NLSE** [1060]. **NLTS** [1261].
no [439, 1181]. **no-go** [1181]. **Nodal** [470, 723, 116, 733, 1683, 406, 1620].
Noether [1786, 1156, 399]. **Noether's** [1336, 382]. **Noether's-type**
 [1336, 382]. **Noise** [504, 1444, 638, 219, 273, 1626, 1174, 1793, 1439, 535, 973,
 1673, 291, 1703, 141, 815, 1555, 1727, 138, 582, 1215, 1880]. **noises**
 [823, 193, 1237]. **Non**
 [1532, 110, 910, 734, 292, 148, 1770, 1347, 242, 1317, 26, 796, 380, 1569, 839,

49, 1187, 1499, 993, 917, 190, 1862, 248, 65, 1538, 754, 1591, 1590, 1506, 53,
 1853, 172, 473, 992, 234, 1016, 624, 1414, 780, 69, 1401, 1254, 970, 1446, 1191,
 870, 25, 448, 1768, 1427, 685, 236, 1544, 866, 629, 820, 530, 1767, 1686, 786,
 524, 20, 291, 374, 1850, 823, 1534, 1077, 1183, 313, 1774, 599, 1679, 1404, 1133,
 1076, 847, 1503, 133, 547, 1285, 1782, 1680, 1516, 22, 1488, 776, 337, 222, 416,
 94, 1422, 1087, 1586, 564, 1807, 1009, 435, 138, 632, 1445, 775, 536, 1423].
non [1654, 1723, 1847, 689, 1381, 23, 278, 590, 1198, 1607, 630]. **non-abelian**
 [1538, 1401, 69, 536, 1198]. **Non-Archimedean** [49]. **Non-autonomous**
 [1532, 1187, 473, 291, 374, 1534, 1516, 222, 1087, 1009, 632, 689].
Non-commutative [292, 624, 780, 1503]. **non-conservative** [524].
non-constant [564]. **Non-convergence** [796]. **non-degeneracy** [1807].
non-degenerate [234]. **non-differentiable** [754]. **non-equilibrium**
 [1191, 313, 435]. **non-Euclidean** [685]. **non-exceptional** [1499].
Non-existence [380, 1850]. **non-Gaussian** [823]. **non-Hermitian**
 [970, 248, 65, 1506, 53, 1016, 786, 133, 547, 1285, 590]. **non-holonomic**
 [599, 1679]. **non-homogeneous** [1591, 1414, 1680]. **non-hydrostatic** [416].
non-ideal [1446]. **non-increasing** [138]. **non-integrable** [337].
non-isentropic [530, 1767, 22, 94, 775]. **non-isometric** [1586].
non-isothermal [992, 1381, 23]. **non-linear** [234, 236, 776, 1445].
non-linearities [870]. **non-Lipschitz** [1654]. **Non-local** [1317, 20].
Non-Lyapunov [1607]. **non-metricity** [1862]. **non-monotone** [1774].
non-negative [1427]. **non-Newtonian** [1590, 1853, 1254].
non-normalizable [1077]. **non-parity-time-symmetric** [190]. **non-PDE**
 [630]. **non-periodic** [1686]. **Non-perturbative** [242]. **Non-power** [1347].
Non-real [110]. **Non-relativistic** [734, 172, 1544]. **non-resistive** [1723].
Non-scattering [26]. **Non-self-adjoint** [148, 25, 448, 820].
non-semisimple [1183]. **non-separable** [917]. **non-shear** [1768].
Non-smoothness [1770]. **non-standard** [278]. **non-stationary** [1654].
non-strictly [993]. **Non-symmetric** [910, 866]. **non-trapping** [1488].
non-trivial [1404, 1133, 1076]. **Non-uniform** [1569, 839]. **non-universality**
 [847]. **non-vacuum** [629]. **non-vanishing** [1423, 1847]. **non-zero** [1422].
nonadditive [1829]. **Nonautonomous** [1416, 1188]. **nonclassical** [1361].
nonclassicality [1355]. **Noncommutative**
 [1373, 430, 987, 1741, 102, 391, 1553]. **noncommutativity** [1355].
Noncontextual [948]. **noncritical** [578]. **nondegeneracy** [1457].
Nonequilibrium [1013, 289]. **Nonexistence** [657, 1826, 200].
nonholonomic [1786, 1197]. **nonhomogeneous**
 [1853, 485, 1209, 615, 302, 871, 354, 1576]. **Nonhydrostatic** [1714].
Nonintegrability [1882]. **nonisentropic** [1028]. **Nonlinear**
 [1194, 1590, 548, 631, 1567, 1795, 1482, 491, 1300, 1639, 719, 143, 1851, 1011,
 1855, 204, 233, 659, 1533, 1145, 92, 810, 490, 1496, 660, 156, 1406, 995, 655,
 758, 867, 1884, 357, 207, 1872, 1439, 1598, 310, 414, 1273, 59, 19, 454, 612,
 232, 82, 57, 458, 1216, 313, 1700, 419, 963, 1747, 306, 130, 732, 1866, 416, 961,
 1428, 690, 141, 332, 360, 1555, 163, 1269, 1807, 582, 1215, 200, 1308, 155, 271,

1796, 841, 278, 1806]. **nonlinearities** [1421, 576, 996]. **nonlinearity** [579, 653, 1176, 1496, 726, 454, 1625, 1570, 658, 360, 578, 1615, 1247, 1025, 909, 1296]. **nonlinearly** [864]. **Nonlocal** [1884, 972, 439, 1421, 118, 1363, 182, 1718, 1780, 1273, 612, 908, 164, 301, 815, 163, 1844, 120, 1811, 1852, 271, 1325, 1623]. **nonlocality** [801]. **nonlocally** [154]. **nonnegative** [96]. **nonperiodic** [1171]. **Nonrelativistic** [1121]. **nonreversible** [1715]. **nonsimple** [517, 1852]. **nonsmooth** [1570]. **nonstandard** [232, 1441]. **nonzero** [290, 963, 1562, 1577]. **Nordström** [691, 594]. **norm** [1039, 551, 621]. **Normal** [761, 634, 755, 309, 854, 749, 1794]. **normalizable** [1077]. **Normalized** [1699, 1771, 1488, 120, 483, 909, 208, 1026]. **Norman** [249]. **norms** [1436]. **Note** [1688, 653, 1755, 448, 1754, 1293, 865, 932, 607, 269, 988, 1315]. **notion** [1526]. **Novel** [1273, 1415]. **Novikov** [1842, 777, 1756]. **nozzle** [1494, 417]. **nozzles** [1597]. **NP** [1510]. **NP-constants** [1510]. **NS** [736]. **NSR** [1022]. **null** [213, 1267, 1358, 218, 1007, 1672, 628, 1321, 793]. **null-infinity** [218]. **Number** [290, 1739, 1364, 827, 1350, 1581, 406, 22, 1393]. **numbers** [51, 73, 1333, 706, 600, 1508, 1233, 672, 1580]. **Numerical** [421, 517, 801, 1197]. **NUT** [365]. **NUT-like** [365]. **nutrient** [1809].

Oberbeck [1804]. **observability** [1230, 876]. **observable** [1668]. **observables** [318, 821, 245, 366]. **observations** [1518]. **Observing** [947]. **obstacle** [152]. **obstruction** [499]. **Obstructions** [1551, 1686]. **obstructs** [1155]. **ocean** [680]. **Options** [1108]. **octonionic** [979]. **octonions** [943]. **Odd** [343, 110, 1389, 1395]. **ODE's** [293, 431]. **Okubo** [1041]. **Oldroyd** [452]. **Oldroyd-B** [452]. **One** [1703, 1739, 928, 860, 1816, 912, 1591, 437, 178, 46, 1288, 1287, 1126, 1066, 1358, 1084, 256, 696, 105, 944, 454, 1597, 1720, 1275, 546, 119, 1845, 400, 22, 1049, 1814, 1295, 1420, 1012, 460, 435, 1303, 96]. **one-** [860, 1288]. **one-constraint** [1720]. **One-dimensional** [1703, 1739, 1816, 912, 1591, 1126, 105, 1845, 22, 1814, 1420, 1012, 460, 435]. **one-form** [1358]. **one-forms** [1084]. **one-packing** [437]. **one-photon** [944]. **one-way** [1049]. **Only** [1850, 1575]. **Only-zero** [1850]. **onto** [407]. **Oosawa** [1559]. **Open** [563, 289, 1258, 1409, 1021, 262]. **operational** [1219]. **operations** [98, 1221, 1220]. **Operator** [394, 438, 713, 1001, 569, 1539, 1848, 25, 448, 1436, 140, 1812, 99, 1718, 1262, 1084, 715, 727, 1101, 560, 1250, 186, 342, 442, 242, 1704, 1703, 301, 1740, 1249, 1393, 1705, 192, 803, 1658, 1620, 1027]. **operator-valued** [1740]. **operators** [1619, 1452, 1157, 1739, 276, 783, 1481, 872, 118, 113, 1062, 147, 1497, 1351, 497, 736, 1150, 999, 1660, 1034, 1414, 341, 670, 964, 1760, 1665, 1791, 834, 882, 741, 1085, 1707, 282, 1858, 1109, 1778, 1793, 472, 688, 647, 605, 124, 1540, 1708, 1742, 1200, 929, 1417, 428, 322, 1834, 1584, 987, 389, 1014, 422, 782, 666, 965, 185, 1501, 441, 424, 457, 1578, 1553, 1678, 1784, 1606]. **opinion** [1790]. **Optical** [698, 1094, 192]. **optics** [457]. **Optimal** [1085, 1742, 1221, 1426, 136, 1859, 1571, 1840, 1202, 1846, 1618, 566]. **optimisation** [1653]. **optimization** [895, 1669]. **optimized** [1057]. **orbit**

[35, 1604]. **Orbital** [1382, 1828]. **orbits** [1509, 404]. **order** [1187, 1071, 754, 1115, 333, 431, 1011, 1407, 204, 1382, 1815, 490, 706, 1475, 339, 494, 870, 995, 103, 1572, 655, 678, 1456, 654, 896, 1307, 119, 1317, 1562, 846, 79, 1082, 1487, 556, 228, 1620, 1448, 1441, 1423, 1796, 1847, 859]. **ordered** [1436, 523]. **ordering** [1290]. **ordinary** [333, 927, 112, 119]. **organization** [337]. **orientation** [1130]. **oriented** [1387]. **origin** [959, 925]. **Orlicz** [1570]. **Ornstein** [830, 1018, 1323, 1335, 1128, 1636, 1641]. **Orthogonal** [1059, 709, 1106, 344, 1581, 1065, 338, 77, 129, 1523, 1451, 149, 1449, 1238, 1716, 1256]. **orthogonality** [444, 1449, 948]. **orthosymplectic** [1157]. **oscillation** [1525, 518, 1429]. **oscillations** [279, 332, 1343]. **oscillator** [110, 477, 1078, 667, 11, 197, 559, 883, 328, 258, 945, 37, 1611, 966, 1845, 1503, 1289, 849, 1179, 738, 1319]. **oscillators** [84, 526, 95, 1291, 1707, 4, 384, 1212, 787]. **Otelbaev** [882]. **other** [790]. **out-going** [60]. **overlap** [1663].

P [1532, 639]. **Pachner** [1056, 1757]. **packed** [409]. **packing** [437, 1864]. **Painlevé** [1198, 1532, 1538, 1097, 927, 1674, 1058, 1521, 529]. **Painlevé/** [1097]. **pair** [95, 1504, 1586]. **pairs** [1675, 1349, 553, 185]. **Palatini** [371]. **para** [440, 1035, 119]. **para-Grassmann** [119]. **para-Krawtchouk** [440]. **para-Racah** [1035]. **parabolic** [24, 862, 969, 1626, 1809, 1002, 804, 232, 57, 1307, 1747, 1516, 1256, 1025]. **paradox** [351, 2]. **parallel** [459, 644]. **parameter** [175, 652, 330, 1745, 154, 219, 1602, 147, 651, 1571, 727, 1653, 931, 1361]. **parameter-dependent** [147]. **parameterization** [1437]. **parameterizations** [1567]. **parameterized** [584]. **parameters** [715, 1317]. **parametric** [1078, 1350, 1581, 1596]. **parametrisation** [1790]. **parametrization** [465]. **parity** [190]. **Parseval** [979]. **part** [571, 779]. **partial** [178, 980, 1188, 1175, 1317, 1425, 450, 1880]. **Partially** [1515, 1204, 1409]. **Particle** [1199, 449, 1509, 1038, 172, 69, 1191, 103, 663, 947, 1460, 1748, 885, 1232, 1704, 404, 1318, 581, 262, 1127]. **Particle-hole** [449]. **particle-in-cell** [1460]. **particles** [1542, 1827, 860, 398, 864, 629, 943, 481, 1865, 721]. **partition** [223, 466, 151, 1091]. **partitions** [618]. **pass** [1466]. **passage** [214]. **passage-like** [214]. **passing** [152]. **passive** [142]. **past** [491]. **patch** [1030, 12, 80]. **path** [132, 334]. **paths** [959, 1196]. **Pathwise** [1439]. **pattern** [162]. **patterned** [960]. **patterns** [405, 734, 1720]. **Pauli** [607, 1001, 429, 1778, 745, 721, 506]. **PBW** [1257]. **PBW-type** [1257]. **PDE** [154, 630, 1098, 455]. **PDEs** [1194]. **peak** [1348, 1524, 1384]. **peakon** [1247]. **peakons** [1382, 1246, 1756, 1828, 725]. **peaks** [1428]. **Peeling** [86]. **pendulum** [376, 1568]. **pendulum-type** [376]. **Penrose** [397, 1782]. **Penrose-like** [1782]. **percolation** [1236, 1367, 926]. **Perfect** [514, 1357]. **perfectly** [1787]. **period** [822]. **Periodic** [1270, 270, 1269, 308, 1739, 1738, 1365, 1639, 569, 761, 356, 311, 1231, 1382, 544, 565, 3, 385, 341, 388, 206, 949, 1791, 408, 726, 1123, 1726, 1490, 605, 1686, 711, 82, 929, 37, 1677, 903, 1249,

817, 427, 192, 803, 824, 1189, 1024, 1303, 1635, 1697, 1309]. **periodically** [458]. **Periodicity** [445]. **permuted** [968]. **Permuting** [312]. **Persistence** [870]. **perspective** [1272, 1281, 630, 83, 1203, 623]. **perturbation** [1010, 182, 1093, 1055, 663, 501, 1347, 936, 1234, 1807, 120, 1849].
Perturbations [561, 928, 1827, 673, 719, 497, 1287, 1718, 123, 258, 1712, 1881, 436, 1882, 347].
Perturbative [368, 1165, 647, 179, 242]. **perturbed** [110, 336, 1523, 1249, 1527, 735, 1361, 1058, 1521, 1310, 226]. **perturbing** [47]. **Petersson** [986, 1861]. **Petviashvili** [1720, 1170, 903, 735]. **Pfaffian** [1284]. **Phase** [1671, 916, 1758, 1556, 504, 213, 1052, 1096, 1602, 661, 339, 205, 798, 1571, 1137, 1427, 1040, 856, 1767, 1651, 277, 994, 300, 547, 176, 391, 337, 231, 770, 1469, 1324, 925, 1852, 1804, 899]. **phase-field** [1469].
phase-space [391]. **phases** [213, 1111, 696]. **phenomena** [520, 206, 1794, 770, 1345, 725]. **phenomenon** [1855, 1245, 1064]. **Philippoff** [1057]. **phonon** [475]. **photon** [944, 1582, 47]. **photonic** [1805, 73]. **Phys** [652, 1337, 1688, 653, 115, 385, 1755, 197, 195, 651, 447, 808, 970, 606, 448, 835, 1095, 54, 114, 1754, 196, 479, 1374, 1203, 1293, 865, 932, 1133, 384, 8, 1753, 607, 269, 1487, 80, 351, 6, 1336, 988]. **Physical** [438, 318, 148, 1695, 313]. **physics** [1391, 904, 33, 455]. **pieces** [647].
piecewise [60, 1353]. **Pinsker** [1877]. **pions** [1563]. **pipes** [1309]. **piston** [22]. **Pitaevskii** [1071, 990, 454]. **Planar** [1271, 1043, 1235, 1787, 314, 942, 1457, 1489]. **Planck** [1627, 168, 1101, 1141, 486, 1379]. **plane** [1824, 223, 459, 1764, 78, 969, 685, 90, 1873, 310, 1839, 1168, 1503, 363, 180, 666, 1179, 618, 71]. **plasma** [1824, 1166, 104, 1720]. **plasmas** [1866, 89]. **plasmon** [183].
plasmon-polaritons [183]. **plate** [1507, 1530, 1431]. **Plücker** [461]. **plus** [1831]. **Podolsky** [1534]. **Pohozaev** [311]. **Poincaré** [129, 1046]. **Point** [1517, 1748, 1060, 142, 827, 541, 110, 822, 115, 1665, 1291, 45, 296, 1266, 864, 282, 1236, 114, 1226, 1293, 885, 428, 753, 8, 1049, 5, 6, 1457].
point-potentials [296]. **points** [1797, 701, 1453, 1047, 590]. **Pointwise** [1677, 616]. **Poiseuille** [1138]. **Poisson** [93, 1203, 1141, 1100, 638, 172, 1463, 1766, 1733, 123, 1171, 83, 1715, 488, 1529, 1695, 1275, 1245, 730, 301, 363, 1759, 203, 1769, 1146, 1100, 353, 260, 840].
Pol [1086]. **polar** [666]. **polaritons** [183]. **polarization** [1473, 377]. **polaron** [496]. **pole** [963, 1562]. **poles** [1884, 1847]. **Pollaczek** [149]. **pollution** [436]. **Polyadic** [1843]. **polyatomic** [1330, 1871]. **polygon** [584]. **polygonal** [293].
polygons [1694, 1754, 603]. **Polymeromorphic** [1764]. **Polynomial** [1056, 462, 431, 1407, 808, 10, 595, 1773, 522, 1736]. **polynomials** [1795, 516, 345, 986, 709, 440, 1035, 1022, 643, 145, 344, 526, 1841, 1073, 1065, 444, 468, 402, 338, 265, 77, 1196, 1523, 149, 1449, 697, 1716, 334, 424].
polytope [886, 781]. **Polytropic** [22]. **Pontryagin** [327, 366]. **population** [956]. **porous** [679, 93, 59, 52, 580, 306, 456, 1024, 1852, 1849].
porous-elastic [59]. **portals** [493]. **posed** [160]. **posedness** [993, 1362, 1424, 660, 577, 1600, 59, 55, 905, 1209, 1467, 1625, 994, 1549, 1692,

1803, 201, 1140, 975, 1343, 480, 534, 235, 871, 1025, 1426, 199, 1310, 1723, 1804, 778, 1576]. **Position** [424, 244, 1611, 1596, 247, 738, 1319]. **position-dependent** [244, 1611, 247, 738, 1319]. **Position-momentum** [424]. **Positive** [539, 1698, 468, 1534, 360, 191, 178, 877, 723, 951, 630, 99, 1733, 1520, 1779, 1285, 1235, 453, 550, 625, 1118, 779, 1464]. **Possible** [1589]. **postselection** [425]. **Potential** [153, 32, 175, 652, 1542, 756, 477, 1023, 675, 1145, 92, 752, 897, 1764, 312, 1791, 198, 651, 542, 25, 448, 1406, 246, 941, 1572, 1626, 1818, 918, 1171, 1770, 848, 693, 813, 1026, 1703, 1061, 863, 844, 1384, 796, 1803, 1488, 1249, 56, 280, 1353, 266, 573, 1392, 849, 203, 192, 803, 996, 1505, 1025, 418, 1606]. **potential-Application** [675]. **Potentials** [1218, 1610, 276, 190, 1664, 840, 810, 833, 877, 808, 970, 723, 882, 296, 1829, 472, 10, 605, 124, 1681, 786, 58, 1699, 1535, 1774, 383, 173, 274, 965, 79, 716, 935, 33, 131, 1514, 538, 1586, 464]. **Potts** [1337, 1279, 223]. **POVMs** [1223, 100]. **Power** [1417, 1609, 1300, 941, 19, 1347, 211, 1864]. **power-law** [1609, 1300, 19, 1864]. **powers** [663]. **Prandtl** [1364, 1339, 1768]. **pre** [507, 512]. **pre-Leibniz** [507]. **pre-rackoid** [512]. **prediction** [1601]. **Preface** [1624]. **preferred** [1130]. **prefractal** [290]. **Preimage** [1642]. **Prelle** [1674]. **Preparation** [252]. **prepared** [1376]. **prescribed** [401]. **presence** [1078, 470, 1480, 1714, 931, 1486, 571, 1423]. **presentation** [1332, 1613]. **Preservation** [1197]. **preserving** [233, 720, 1460, 795]. **pressure** [1763, 1402, 1438, 520, 1446, 1767, 1468, 1252, 1493, 936, 1248, 1302, 1642, 869]. **pressureless** [1302, 1426]. **prevents** [537]. **Pridmore** [1125]. **Prime** [1223, 429]. **primitive** [905, 61, 1616]. **primordial** [299]. **principal** [1735]. **principle** [330, 297, 912, 893, 642, 1320, 545, 327, 506, 607, 285, 1514, 788, 1566]. **principles** [1481, 1684, 1746, 407, 649, 707, 829]. **prize** [904]. **Probabilistic** [490, 1053, 252]. **probabilities** [133, 547]. **Probability** [1560, 322, 1645]. **problem** [1415, 1585, 836, 1011, 1030, 1601, 992, 355, 1602, 624, 752, 1124, 1797, 877, 723, 1571, 25, 448, 329, 261, 1330, 1840, 1730, 1718, 583, 1884, 387, 263, 83, 1203, 1002, 1209, 1854, 1695, 654, 1347, 302, 1731, 1141, 1557, 1679, 1138, 1570, 844, 22, 876, 453, 831, 658, 1750, 231, 1476, 12, 80, 1800, 1801, 1201, 1029, 531, 735, 869, 939, 871, 1620, 1067, 1423, 1173, 1464, 1380, 23, 278, 1181, 1576, 1863, 1027, 937, 988]. **Problems** [1306, 330, 304, 1481, 1023, 1271, 969, 1378, 1137, 1427, 866, 1734, 811, 85, 1653, 277, 1516, 1047, 1098, 294, 1678, 1658]. **Proca** [1476]. **procedure** [254]. **process** [144, 1126, 1013, 1018, 1323, 1335, 1128, 1636, 1641]. **processes** [946, 597, 1715, 1645, 44, 1508, 1054, 1566, 566, 1331]. **processing** [1005, 325]. **product** [766, 1122, 1182, 642, 1154, 1262, 1451, 621, 1630]. **production** [597, 57, 1143, 1366, 566]. **Products** [1750, 513, 1436, 1812, 560]. **profiles** [1342, 158]. **Progressive** [1117]. **Projectability** [407]. **projection** [1742]. **projections** [1106]. **projective** [1256]. **prolate** [1002, 753]. **proliferation** [1136]. **proof** [921, 587, 1453, 664].

Propagation [1824, 408, 1726, 1345, 1166, 1094, 1640, 163, 1269, 199, 1849].
propagator [477]. **Proper** [881, 1115]. **Properties**
 [1491, 478, 1838, 676, 350, 1474, 830, 1781, 68, 1034, 341, 498, 870, 1139, 1829,
 434, 1409, 1595, 293, 1431, 1503, 1758, 1233, 1615]. **property**
 [1041, 209, 335, 1641]. **proportional** [687]. **protocols** [214, 250]. **Pseudo**
 [97, 1745, 1260, 898, 186, 323, 1747, 641, 1190, 703, 1091, 1025, 31].
pseudo-bosonic [323]. **Pseudo-fermionic** [97]. **pseudo-forest** [1091].
pseudo-fractional [1745, 1190, 703]. **pseudo-generalization** [186].
pseudo-hermitian [898]. **pseudo-Hermiticity** [1260, 641, 31].
pseudo-Mittag-Leffler [1745]. **pseudo-parabolic** [1747, 1025].
pseudoclassical [135, 785]. **pseudodifferential** [1200]. **pseudospectrum**
 [1369]. **PT** [970, 1133, 1664, 1291, 786, 1076, 133, 547, 192, 803, 31].
PT-broken [547]. **PT-symmetric** [1133, 803, 1076, 133, 192].
PT-symmetrically [1291]. **PT-symmetry** [31]. **Publisher**
 [1688, 653, 1755, 448, 1754, 1293, 865, 932, 607, 269, 988]. **Pullback**
 [677, 1441, 471, 1530, 291, 1732]. **pulselike** [1273]. **pumping** [408, 74].
punctured [1764]. **pure** [1665, 741, 648, 1449, 748, 857]. **purely** [333, 1080].

Q [1572, 342]. **Q-balls** [1572]. **q-deformed** [342]. **QED** [1544]. **QFT** [1671].
Quadratic [695, 1369, 585, 221, 708, 333, 115, 916, 692, 726, 114, 1101, 1770,
 1257, 8, 268, 5, 6, 1366]. **quadratical** [266]. **quadratically** [79, 716].
quadratures [42]. **quadrilaterals** [1653]. **quadrupole** [447, 7]. **Qualitative**
 [293, 1431, 1247]. **quantification** [1610]. **Quantifying** [1789]. **quantitative**
 [1375]. **quantities** [570, 708, 369]. **Quantization**
 [135, 763, 369, 1134, 525, 78, 851, 70, 64]. **Quantized** [1049, 1109, 785].
quantizer [322]. **quantizer-dequantizer** [322]. **Quantum**
 [1499, 1542, 1433, 1605, 467, 643, 29, 624, 364, 447, 7, 559, 1083, 1332, 1793,
 326, 945, 348, 1706, 212, 327, 1107, 623, 1762, 176, 193, 185, 621, 351, 2, 138,
 1181, 264, 134, 308, 1452, 251, 283, 317, 188, 423, 248, 65, 411, 850, 746, 722,
 1792, 1039, 177, 101, 1161, 1110, 1222, 1000, 187, 1870, 1078, 1591, 1601, 1182,
 1547, 548, 66, 136, 1859, 27, 1354, 500, 1075, 1180, 312, 1857, 494, 1539, 949,
 792, 642, 626, 1312, 34, 246, 45, 255, 421, 743, 1095, 883, 1858, 425, 1225, 742,
 258, 1409, 696, 1156, 1835, 83]. **quantum**
 [1203, 1819, 243, 620, 524, 1079, 509, 894, 1473, 588, 342, 442, 554, 1389, 349,
 466, 1074, 1776, 426, 1158, 215, 1290, 1485, 1666, 1196, 1202, 300, 847, 1503,
 1596, 1526, 194, 1449, 227, 1613, 133, 1508, 1803, 1112, 1486, 88, 666, 137,
 391, 1814, 716, 1082, 1487, 739, 1098, 253, 747, 1221, 1587, 1759, 1179, 1295,
 1080, 1630, 1394, 1395, 250, 32, 1592, 1146, 920, 1160, 1856, 1548, 744, 1237,
 978, 89, 1184, 1454, 435, 622, 1728, 1092, 1560, 901, 1356, 247, 738, 390].
quantum-mechanical [666]. **quantum-spin** [45]. **quantum-to-classical**
 [1222]. **quark** [1372]. **quark-lines** [1372]. **quarter** [310]. **quartic**
 [477, 844, 1736, 567]. **Quasi** [1124, 1123, 1263, 1303, 1635, 766, 862, 298, 312,
 667, 1129, 1545, 1142, 605, 1597, 82, 322, 1677, 1825, 125, 1842].
quasi-adiabatic [312]. **quasi-duality** [125]. **quasi-Einstein** [1129].

quasi-entropies [1545]. **Quasi-factorization** [1263]. **quasi-geostrophic** [1142]. **Quasi-homogeneous** [1124]. **quasi-linear** [862]. **quasi-local** [1825]. **quasi-locally** [766]. **quasi-one-dimensional** [1597]. **Quasi-periodic** [1123, 1303, 1635, 605, 82, 1677]. **quasi-probability** [322]. **quasi-resonant** [1842]. **quasi-symmetry** [298]. **quasialgebras** [1092]. **quasigraded** [968]. **quasigroups** [125]. **quasilinear** [912, 311, 1729, 1463, 723, 969, 1733, 657, 732, 1143, 817, 270, 843, 1464, 1430]. **quasilocal** [1711]. **Quasinormal** [874, 329]. **Quasiperiodic** [1406, 647, 1598, 1784]. **Quasitriangular** [1092, 1451]. **quaternion** [1684, 1230, 1407]. **quaternion-valued** [1230]. **qubit** [850, 67, 745]. **qubits** [1081]. **qudits** [429]. **questions** [1021]. **quintic** [1697]. **Quiver** [1294, 30]. **Quivers** [30].

R [508, 1536, 748, 353, 1650]. **R12** [969]. **R2** [538]. **R3** [549, 1634, 909]. **Rabi** [1870]. **Rabinowitz** [1137]. **Racah** [239, 1035, 1841, 32]. **rackoid** [512]. **radial** [959, 833, 501, 1, 479, 938, 1438]. **Radially** [161]. **radiating** [1489]. **Radiation** [1824, 678, 1260, 1315, 748, 176]. **radiative** [1459, 942, 460]. **radius** [601, 1837, 1796]. **Ragnisco** [1131]. **Rajeev** [945]. **Raman** [214, 1697]. **Ramond** [340]. **Random** [954, 93, 99, 956, 291, 823, 1087, 1418, 709, 1052, 1096, 800, 470, 53, 336, 959, 1182, 670, 1036, 949, 799, 682, 834, 1406, 1350, 1581, 1329, 282, 712, 310, 1409, 944, 1582, 620, 1168, 1820, 303, 374, 1495, 892, 1834, 1584, 1515, 707, 1238, 1059, 1112, 335, 1286, 1393, 1790, 815, 1869, 582, 632, 889, 1215, 901]. **random-cluster** [1329]. **randomness** [467, 177]. **range** [569, 1115, 954, 706, 741, 1236, 472, 688, 105, 848, 1637, 1417, 383, 907, 33]. **Rank** [1287, 928, 1813, 1718, 100]. **Ranken** [945]. **rapid** [635]. **Rapidly** [919]. **rarefaction** [352]. **Rasle** [1252, 1432]. **Ratcliff** [586]. **Rate** [737, 597, 1128, 1146]. **rates** [90, 1405, 1379, 1210, 1465, 89, 1489, 1654]. **Rational** [423, 522, 1035, 1522, 878, 157, 1743, 884, 1736]. **rationality** [1153]. **ratios** [1350, 1581, 1734]. **Rayleigh** [988, 1731, 937]. **RBF** [1242]. **Reachability** [1190, 703]. **reacting** [991, 1494]. **reaction** [90, 678, 1673, 1495, 1640, 873, 1331]. **reaction-diffusion** [90, 1495, 1640, 873]. **reactions** [1682]. **real** [330, 190, 110, 1664, 930, 826, 865, 804, 714, 1458, 1082, 1487, 1796, 705, 590]. **real-matrix** [590]. **Realizability** [635]. **realization** [135, 1539, 1255]. **Realizations** [241, 1406, 129, 1290, 228]. **realm** [1038]. **Reciprocal** [108]. **Reconstruction** [1681, 70, 157]. **recovered** [1325]. **recovery** [1264]. **rectangles** [895, 160, 831]. **rectangular** [970, 786, 997]. **Recurrence** [149, 502]. **recurrences** [1370]. **Recurrent** [358]. **recursion** [1861, 1333, 157]. **recursions** [1011]. **Reduced** [395, 1070, 902, 1767, 1, 479, 1866, 1728]. **Reducibility** [198, 258, 181]. **Reducible** [182]. **Reduction** [375, 295, 1439, 924, 324, 1666, 1550, 562]. **Reductions** [228, 1532, 1313, 1565]. **Referee** [15]. **reference** [1225]. **reflecting** [1883]. **reflection** [642, 268, 625, 1118]. **reflection-equation**

[268]. **reflectionless** [1664]. **regardless** [31]. **regime** [541, 773, 1071, 990, 645, 1584]. **region** [1052]. **regions** [101]. **Regular** [932, 888, 374, 1183, 922, 1056, 1757, 1867, 160, 1495, 1009, 1204, 689, 1849]. **Regularity** [837, 1385, 1207, 1649, 278, 993, 1114, 205, 1066, 1829, 52, 1742, 201, 975, 1379, 731, 1422, 1425, 1832, 779, 1240]. **Regularization** [280, 1836]. **regularized** [368, 1424]. **Reiner** [1057]. **reinforcement** [1846]. **Reissner** [691, 594]. **Reissner-Nordström** [594]. **Reissner-Nordström-type** [691]. **related** [154, 1538, 1106, 526, 205, 249, 1529, 560, 617, 985, 1844]. **Relating** [1355]. **relation** [502, 435]. **Relations** [682, 341, 1401, 1879, 9, 835, 1065, 444, 585, 1595, 215, 149, 1449, 1498]. **relative** [1263, 131, 704, 325, 566]. **Relativistic** [69, 629, 885, 405, 1121, 1326, 174, 890, 172, 734, 1823, 600, 121, 1544, 18, 288, 851, 1468, 977, 37, 1535, 209, 933, 1345, 360, 1551]. **relaxation** [858, 90]. **relevant** [1470]. **Remarks** [544, 301]. **renewal** [828]. **renormalization** [1671, 368, 1165, 719, 822, 634, 68, 897, 1475, 560, 209]. **Renormalized** [1427, 320]. **Rényi** [746, 1709, 1003, 215, 1005, 325, 1082, 1487]. **repeaters** [623]. **Replica** [1192, 1089, 224]. **Representation** [1230, 1415, 1333, 1661, 1662, 1755, 1752, 511, 966, 998, 666, 915, 1578]. **representation-independent** [666]. **Representations** [495, 126, 1702, 1773, 1151, 1398, 1106, 1579, 964, 1265, 1707, 128, 1735, 697, 79, 1081, 662]. **repulsion** [537, 816, 818, 732, 532]. **repulsive** [941, 1818, 611, 1245]. **Rescaling** [1856]. **Reservoirs** [681]. **residue** [1553]. **resistive** [1690, 1723]. **resistivity** [1298]. **Resolvent** [1778, 543]. **resonance** [1658]. **Resonances** [464, 774, 918]. **Resonant** [903, 1842]. **resonator** [774]. **resource** [177, 1219, 868]. **respect** [1596, 1253]. **respecting** [1033]. **Response** [652, 115, 196, 1533, 645, 1234]. **rest** [397]. **rest-mass** [397]. **restricted** [146, 1271, 1245, 1047, 1454]. **Restriction** [1084]. **restrictions** [766]. **result** [1142]. **Results** [294, 475, 517, 1792, 638, 1602, 1378, 610, 277, 1021, 202, 306, 1184, 566]. **Resurgence** [286]. **retarded** [1745, 1459, 1555, 1732, 1880]. **Retraction** [606]. **reversal** [566]. **reverse** [572]. **review** [1282]. **revised** [1448, 1847]. **Revisit** [206]. **revisited** [403, 1089, 1218, 388, 195, 236, 1546, 87, 196, 1159, 972, 363, 1397]. **Revisiting** [1415, 476, 847, 1005]. **reweighting** [1282]. **Reynolds** [736, 706]. **Ricci** [1211, 1250, 1360, 1691, 439, 1525]. **Ricci-flat** [439]. **Riemann** [269, 763, 754, 520, 355, 995, 866, 1884, 530, 1767, 1063, 1252, 1783, 1680, 1248, 189, 231, 94, 770, 39, 531, 775, 1448, 1423, 1623, 1847]. **Riemann-type** [531]. **Riemannian** [853, 1433, 1068, 1211, 70]. **Riesenfeld** [1291]. **Riesz** [1019]. **Rigged** [1285]. **right** [333, 431, 1011, 310]. **right-hand** [333, 431, 1011]. **rigid** [970, 241, 786]. **Rigidity** [1835]. **rigidly** [1357, 1402, 1438]. **Rigorous** [475, 1364, 822, 74, 1420, 1184, 1787]. **Rindler** [180]. **ring** [142]. **ringdown** [329]. **rings** [1276, 940, 601, 1138]. **Rn** [256, 867, 277, 689]. **RNA** [1387]. **Robertson** [272, 1129]. **Robin** [276, 304, 811, 1653, 47, 831, 690]. **robust** [1004]. **Robustness** [1530, 1060].

Roch [39]. **role** [893, 219, 1272, 1281, 697]. **roles** [213]. **root** [1282, 360].
Rosen [700]. **Rota** [736, 1150, 999, 1541]. **rotating**
 [1048, 1357, 1402, 1438, 679, 1339, 74]. **rotation** [1480, 1714, 1750, 165].
rotation-two-component [165]. **rotational** [1067]. **rotator** [1288, 967].
rough [872, 274]. **Rubinstein** [1181]. **ruled** [1543]. **rules** [215]. **Runge**
 [1509]. **rupture** [1698].

Sachdev [1192, 242]. **Saint** [122]. **same** [331, 1586]. **sample** [889]. **sampling**
 [1618]. **sandwich** [395]. **sandwiched** [1003, 1005]. **satisfy** [932, 888].
satisfying [292, 1840, 880]. **saturable** [1176]. **saturation** [456, 841]. **Scalar**
 [1265, 1348, 1344, 355, 951, 150, 934, 1301, 372, 595, 1120, 102]. **scale**
 [1567, 1608, 1461, 758, 1155, 313]. **scales** [382, 1336]. **Scaling**
 [959, 71, 1364, 706]. **Scattering** [236, 691, 274, 1585, 475, 1472, 1346, 1608,
 655, 1818, 611, 848, 546, 26, 33, 285, 1201, 735, 1721, 1697]. **scenario** [1473].
Schauder [864]. **scheme** [768]. **Schlingemann** [1221]. **Schramm** [263].
Schrieffer [846]. **Schrödinger**
 [808, 1529, 1482, 392, 135, 785, 1300, 276, 1574, 499, 1639, 569, 113, 1348,
 1528, 311, 840, 1176, 762, 1729, 659, 1533, 497, 1145, 92, 916, 321, 810, 490,
 1496, 660, 1463, 670, 1760, 1315, 1657, 1791, 208, 198, 111, 723, 1810, 1406,
 741, 1730, 81, 236, 610, 995, 655, 1766, 282, 1873, 1858, 814, 501, 867, 1884,
 1733, 1778, 727, 657, 535, 1598, 310, 1171, 10, 605, 124, 1770, 488, 487, 454,
 693, 82, 654, 929, 1534, 428, 1535, 164, 1834, 987, 1703, 274, 721, 1384, 963,
 1205, 130, 193, 776, 1304, 1249, 266, 79, 817, 1696, 935, 573, 441].
Schrödinger [961, 181, 203, 1724, 690, 843, 1705, 192, 803, 360, 314, 1807,
 996, 120, 155, 271, 1303, 1784, 1635, 1173, 1296, 1606, 1430].
Schrödinger-Poisson [840]. **Schrödinger-quantized** [785].
Schrödinger-type [321]. **Schur** [159, 125, 618, 705]. **Schwartz** [919, 1289].
Schwarz [1073, 340]. **Schwarzschild** [606, 1509, 515, 14, 874, 1119, 1837].
Schwarzschild-de [874]. **Schwinger** [213, 127, 393]. **Scott** [174]. **screen**
 [1787]. **sea** [917, 1424]. **sea-ice** [1424]. **search** [507]. **second**
 [1071, 1538, 1685, 119, 228, 1441]. **second-order** [1441]. **secretion** [732].
sector [1315, 342]. **sectors** [423, 1062]. **security** [1161]. **seed** [445]. **Segel**
 [841]. **segments** [1013]. **Segur** [1844, 1868]. **Seiberg** [558]. **Self**
 [1540, 1704, 337, 1445, 1006, 1000, 1656, 1663, 489, 147, 1665, 25, 448, 148,
 820, 426, 1014, 1466, 1620]. **Self-adjoint** [1704, 147, 1665, 1620].
self-adjointness [426]. **self-consistency** [1000]. **self-dual**
 [1006, 1656, 489, 1466]. **Self-intersection** [1445]. **Self-organization** [337].
self-overlap [1663]. **self-similar** [1014]. **Self-similarity** [1540]. **Semantic**
 [1161]. **semiclassical** [281]. **Semi**
 [455, 1038, 722, 1823, 1065, 1676, 303, 1833, 1535, 183, 613, 815].
Semi-algebraic [455]. **semi-classical** [1038, 722, 1065]. **semi-continuity**
 [303, 815]. **semi-dissipative** [1676]. **semi-infinite** [183]. **semi-martingales**
 [613]. **semi-relativistic** [1823, 1535]. **semi-stationary** [1833]. **semicausal**
 [1083]. **Semiclassical** [1610, 1001, 25, 448, 249, 85, 1164, 1881, 1882, 1096,

1114, 1354, 413, 733, 1742, 1586]. **semiconductor** [564]. **semiconfined** [1611]. **Semicontinuity** [1253]. **semigroup** [830]. **semigroups** [1083, 669]. **semilinear** [1421, 1026, 1700, 1208, 272, 976, 1725]. **semimetal** [1260]. **semimetals** [1501]. **semisimple** [1183]. **semitoric** [1479]. **sensitivity** [57, 532, 841]. **Separability** [1166, 980, 404, 1741]. **separability/entanglement** [980]. **separable** [917]. **Separation** [268, 646, 1149]. **separations** [757]. **Separatrices** [106]. **Separatrix** [1881]. **Sequences** [1475, 1829]. **sequential** [324]. **series** [1117, 317, 541, 1055, 47, 603, 1735]. **sesquilinear** [148]. **set** [1585, 137, 669]. **sets** [1781, 290, 326, 1007, 1672, 419, 1782, 1186, 1116, 505, 455]. **setting** [1709]. **settings** [1264]. **several** [1647, 1273]. **Shabat** [1170]. **shadow** [1166]. **shadows** [1859]. **shallow** [720, 797, 1695, 1806]. **shallow-water** [1806]. **shaped** [492, 911]. **shapes** [1593]. **Shapovalov** [748]. **Sharp** [971, 90, 1236, 671, 297, 746]. **sharply** [1762]. **shear** [1099, 1768, 218]. **sheaves** [139]. **sheets** [183]. **shells** [727]. **Sherrington** [264]. **shift** [220]. **shifts** [676, 1449]. **shock** [1614, 1302]. **shocks** [1135, 1494, 60, 1248]. **short** [848, 649, 383, 829]. **short-range** [848]. **short-time** [649, 829]. **SIC** [1223, 100]. **SIC-POVMs** [1223]. **side** [177]. **sided** [1874]. **sides** [333, 431, 1011]. **Siegel** [1646]. **Sierpinski** [901]. **sieved** [145]. **sigma** [1843]. **Sign** [1570, 729, 118, 1023, 488, 730, 16, 314, 1173]. **Sign-changing** [1570, 729, 118, 1023, 488, 730, 16, 314, 1173]. **signal** [57, 1143, 532]. **signal-dependent** [1143, 532]. **signature** [722]. **similar** [1014]. **similarity** [1540]. **Simons** [1798, 996, 1622, 489, 574]. **Simple** [1847, 1603, 1033, 289, 140, 1884, 715, 173]. **simplex** [584]. **simplification** [414, 768]. **simulating** [624]. **sinc** [1608]. **sine** [759, 518, 582, 1732]. **sine-Gordon** [518, 582, 1732]. **Sinelshchikov** [1855]. **Singer** [1674]. **single** [740, 276, 1359, 67, 26, 1881, 1353, 1856, 1882]. **single-degree-of-freedom** [1881, 1882]. **single-entity** [740]. **single-qubit** [67]. **single-well** [276]. **singlet** [1612]. **singly** [259]. **Singular** [928, 295, 457, 1022, 890, 1342, 1344, 1093, 1244, 1764, 1797, 498, 1571, 1848, 1818, 472, 1767, 124, 57, 813, 313, 1386, 658, 231, 131, 1527, 1025]. **singularities** [1805, 1609, 207, 645, 1386, 363, 571]. **Singularity** [1413, 117, 38, 752, 861, 161]. **singularly** [1058, 226]. **SIR** [908, 1785, 163, 1269]. **SIRB** [1636]. **site** [1192]. **Sitter** [197, 251, 604, 11, 626, 18, 328, 874, 1788, 509, 186, 844, 1208, 698, 347, 982]. **six** [1043, 519]. **sixth** [1572]. **sixth-order** [1572]. **size** [242]. **SK** [1089, 957]. **Skew** [998, 560]. **Skew-symmetric** [998]. **Skitovich** [66]. **Sklyanin** [440, 1035]. **Sklyanin-like** [440]. **Skyrme** [1563]. **slab** [656]. **slant** [1034]. **Slightly** [679]. **slip** [1573, 614]. **slow** [41, 761, 219, 1046]. **Smale** [702, 853, 1121, 890, 1713, 451]. **Small** [168, 934, 1301, 1127, 499, 1231, 34, 874, 207, 1743, 1458, 1302, 1058]. **small-amplitude** [1231]. **Small-time** [168, 499]. **smallest** [226]. **Smith** [749, 1392]. **Smoluchowski** [161]. **Smooth** [1577, 906, 1275, 60, 383, 1725]. **smoothness** [1770]. **Snyder** [197, 11, 328]. **Snyder-de** [11]. **Sobolev**

[619, 204, 762, 1602, 660, 1657, 386, 1142, 1213, 1722, 1570, 274].
Sobolev-type [1722]. **soft** [709, 1726]. **soils** [456]. **solid** [1389]. **solids** [1390]. **solitary** [421, 130, 271]. **solitary-wave** [130]. **soliton** [92, 995, 1565, 765, 1842, 859]. **solitons** [514, 1531, 1213, 553, 903, 771, 1525, 735]. **Solution** [1011, 808, 10, 230, 491, 862, 520, 311, 1145, 1650, 1191, 1878, 995, 812, 52, 861, 932, 888, 1651, 58, 1431, 994, 164, 1570, 1405, 1680, 907, 968, 1466, 1345, 1146, 1728, 155, 775, 536, 1489, 1381, 841, 1697, 1319]. **Solutions** [1585, 24, 1798, 588, 1430, 1849, 392, 91, 579, 653, 604, 1311, 719, 912, 1851, 420, 1573, 1348, 1363, 1357, 1402, 1438, 356, 166, 840, 539, 1023, 1230, 992, 1344, 489, 906, 1104, 1693, 910, 1136, 92, 584, 413, 927, 838, 1172, 692, 877, 1254, 808, 723, 726, 116, 969, 1810, 1427, 1406, 921, 386, 837, 1698, 777, 733, 1689, 328, 864, 867, 434, 842, 1809, 1733, 715, 1385, 357, 530, 1767, 451, 657, 1598, 162, 1171, 10, 117, 1770, 414, 1273, 488, 19, 487, 1529, 1125, 932, 888, 160, 20, 934, 1301, 1063, 1468, 612, 905, 1252, 1854, 1850, 1625, 275, 82, 57, 615, 1216, 1026]. **solutions** [1275, 1307, 1493, 1534, 1722, 1699, 1771, 37, 302, 728, 237, 60, 393, 1645, 730, 1536, 75, 1384, 1785, 656, 963, 1655, 1248, 609, 1562, 130, 732, 1488, 1696, 231, 167, 573, 416, 1871, 94, 469, 770, 1379, 1769, 1428, 1634, 294, 272, 1633, 158, 61, 16, 360, 314, 765, 578, 731, 1210, 868, 942, 1029, 1465, 1616, 538, 824, 1131, 1725, 460, 450, 1569, 1615, 1807, 353, 120, 315, 165, 483, 1204, 1024, 200, 1340, 1842, 452, 347, 418, 729, 1105, 1448, 1310, 1432, 1303, 1325, 1635, 1649, 614, 1173, 1464, 1296, 354, 23, 278, 1806, 161, 859, 1863]. **solvability** [667, 1809, 533, 1800, 1801, 939]. **Solvable** [431, 1664, 333, 284, 338, 1054, 1353, 1505]. **solve** [1482]. **Solving** [392]. **Some** [1792, 1684, 298, 1211, 891, 603, 301, 1615, 566, 1610, 960, 1413, 1271, 413, 1760, 1829, 465, 650, 985, 1526, 1233, 1464]. **source** [1344, 1730, 866, 387, 533, 868, 1462, 200]. **sources** [1632, 1266, 419]. **Space** [710, 1558, 614, 1710, 168, 1165, 1631, 41, 1106, 1853, 916, 667, 367, 397, 81, 1284, 655, 13, 54, 1788, 758, 150, 387, 1142, 801, 509, 1637, 1275, 977, 186, 1667, 1536, 1570, 1588, 1712, 240, 432, 1292, 1285, 1741, 280, 391, 337, 1167, 238, 1295, 1379, 1592, 1604, 925, 1489, 1723, 1309]. **space-dependent** [387]. **space-periodic** [1309]. **Space-time** [710, 1558, 614, 801, 509]. **spaces** [1187, 1242, 917, 220, 763, 204, 1034, 660, 1459, 1760, 575, 1358, 1517, 1084, 979, 820, 1113, 1495, 373, 1290, 274, 966, 285, 1009, 1324, 1556, 305, 689, 1240]. **Spacetime** [217, 359, 1598, 1509, 1166, 398, 626, 1267, 1510, 18, 1226, 1293, 934, 844, 931, 1208, 794, 272, 1119, 631, 1725, 86, 519]. **spacetimes** [516, 1594, 1710, 1227, 1744, 72, 514, 1129, 1632, 629, 952, 1164, 894, 1405, 748, 1825, 1826, 1464, 982, 1551]. **spacing** [883]. **spanning** [1116]. **Spatial** [58, 1510, 1544, 1168, 1120, 1549, 351, 1634, 2, 1796, 96]. **Spatially** [1554, 1496, 864, 481, 934, 748, 907, 1634]. **spatio** [1640]. **spatio-temporal** [1640]. **spatiotemporal** [1325]. **Special** [1624, 989, 1886, 1619, 1006, 1199, 1340]. **species** [1136, 816, 533, 353, 1641]. **spectra** [1805, 190, 648]. **Spectral** [1543, 276, 411, 1474, 872, 895, 1506, 930, 346, 498, 1848, 834, 882, 1490, 1017,

1014, 44, 1864, 1256, 1501, 436, 192, 913, 1199, 1792, 836, 437, 1034, 670, 296, 1675, 1163, 1653, 714, 1776, 717, 1553, 978, 1719, 1278, 937, 988]. **spectrum** [175, 652, 1001, 1020, 990, 48, 1870, 1016, 635, 1665, 651, 741, 1390, 1226, 1293, 1708, 1777, 1189, 1423]. **speed** [621, 199]. **sphere** [1326, 142, 1088, 930, 1713, 261, 596, 342, 442, 796, 1179, 76]. **spheres** [887]. **spherical** [470, 1459, 727, 957, 1002, 796, 666, 857]. **spherically** [123, 1770, 1232, 453, 1634]. **spheroidal** [1002]. **spheroids** [753]. **spiked** [971]. **Spin** [785, 1510, 852, 943, 1822, 194, 264, 984, 946, 1663, 1162, 784, 1073, 45, 1178, 338, 511, 645, 957, 885, 348, 1250, 1077, 1389, 1074, 1007, 1758, 609, 791, 857, 1569, 347, 778, 390]. **Spin-0** [1510]. **spin-1** [645, 885, 1007]. **spin-1/2** [645, 885]. **spin-2** [1007]. **spin-boson** [1077]. **spin-glass** [264]. **spindle** [398]. **spinor** [509, 1836]. **spinorial** [1711]. **spins** [1389]. **spiral** [675]. **Split** [715]. **splitting** [1673, 1881, 56, 366]. **splittings** [1451]. **spontaneous** [944]. **SPT** [819]. **SqF4** [442]. **square** [1117, 244, 1282, 362, 360]. **square-integrable** [1117]. **square-root** [360]. **squares** [364, 1354, 745]. **squeezed** [1838]. **SSH** [1217]. **Stability** [1099, 1224, 940, 459, 1665, 1246, 1349, 18, 1142, 1495, 1731, 1175, 1352, 202, 306, 564, 1046, 1575, 761, 376, 1298, 1382, 1693, 92, 751, 734, 1103, 1297, 121, 421, 1490, 1756, 104, 1531, 1833, 1597, 1213, 908, 1535, 1185, 1712, 63, 1634, 578, 1828, 1799, 1215, 1876]. **Stabilization** [456, 876]. **stabilizer** [429]. **Stable** [1533, 265, 419, 283, 219, 66, 408, 1013, 1850, 1366]. **staggered** [798]. **standard** [430, 463, 1498, 278, 1108]. **standing** [1533, 208]. **Stark** [1223, 918]. **stars** [123]. **state** [309, 1037, 423, 1071, 1591, 1387, 311, 1145, 1282, 496, 386, 236, 941, 856, 357, 1767, 657, 1171, 105, 1468, 591, 164, 1666, 1775, 1072, 1680, 1587, 770, 556, 505, 1302, 1434, 622, 483, 271, 1173]. **States** [1594, 1060, 1795, 175, 652, 1117, 244, 774, 1452, 766, 1472, 350, 1612, 569, 940, 1369, 178, 526, 548, 67, 321, 1823, 1180, 78, 667, 651, 1737, 1628, 1154, 668, 1396, 1126, 112, 1013, 1698, 663, 1544, 1766, 465, 1156, 290, 97, 1779, 1820, 894, 492, 693, 478, 1389, 323, 985, 648, 880, 664, 1838, 697, 1677, 1248, 334, 88, 671, 884, 819, 1080, 1630, 1394, 1395, 1455, 314, 564, 152, 435, 909, 738, 1319, 96]. **static** [1008, 1503, 1837]. **Staticity** [1511]. **Stationary** [1744, 1254, 1126, 611, 750, 1166, 991, 1357, 1402, 1438, 1693, 670, 809, 482, 501, 1385, 1833, 1274, 891, 656, 1825, 1636, 1489, 1654, 1478]. **statistic** [1527]. **Statistical** [337, 1194, 65, 1272, 1281, 1706, 828]. **statistics** [1371, 960, 1193, 1350, 1581, 883, 282, 319, 1017, 572, 334]. **statistics-Interpolating** [334]. **steady** [1030, 940, 1339, 1494, 1737, 261, 1768, 1698, 1305, 1138, 44, 1492, 564, 435]. **Stealth** [673]. **steep** [693, 203, 996, 418]. **Steganography** [250]. **stem** [1842]. **step** [1884, 1564, 1623]. **step-like** [1884, 1564, 1623]. **steps** [309]. **Stewartson** [842]. **Stieltje** [344]. **Stimulated** [214]. **Stinespring** [253, 1152]. **Stochastic** [1688, 1644, 858, 1883, 1134, 675, 680, 535, 973, 310, 851, 324, 193, 450, 219, 273, 473, 474, 954, 1299, 751, 1746, 1147, 956, 434, 1439, 83, 1203, 981, 1673, 291, 374, 1495, 1637, 1270, 823, 1018, 1323, 1335, 1722, 1128, 1516, 307, 1846,

1098, 222, 1618, 141, 518, 750, 815, 1127, 1802, 1087, 1636, 1009, 582, 788, 632, 1046, 1324, 1445, 1566, 155, 689, 1429, 1478, 1641, 807]. **Stokes** [1214, 1206, 352, 1854, 237, 486, 1341, 1379, 1146, 1381, 161, 1573, 1362, 838, 1401, 575, 261, 812, 451, 303, 1044, 1274, 891, 1558, 60, 1802, 779, 1009, 939, 1204, 1024, 1340, 1426, 1310, 1654, 532, 354, 1576]. **strain** [779]. **strained** [321]. **strange** [1107]. **stratified** [279]. **stretch** [1638]. **stretch-twist-fold** [1638]. **stretching** [1057]. **Strict** [626, 1329, 369]. **strictly** [993]. **string** [515, 507, 555, 18]. **strings** [1656, 510, 256]. **Strip** [1255, 1298, 1628]. **Striped** [786, 970]. **strips** [1502]. **Strong** [992, 537, 302, 1280, 253, 1325, 23, 420, 752, 496, 1818, 451, 19, 932, 888, 1742, 1651, 615, 1493, 994, 184, 958, 942, 460, 1024, 1381, 354]. **strongly** [1010, 671, 590]. **structural** [158]. **Structure** [979, 1060, 1671, 1522, 763, 930, 27, 507, 706, 555, 1002, 1685, 1803]. **structured** [956]. **Structures** [361, 695, 1483, 409, 1660, 1411, 1444, 289, 804, 1177, 714, 70, 1451, 363, 886, 1604, 1638, 1842, 705]. **Stuart** [76]. **stuck** [1387]. **Stückelberg** [1860]. **Stückelberg-modified** [1860]. **Study** [1402, 1438, 1101, 543, 1393]. **Sturm** [882, 1085, 1734, 1718, 77, 1762]. **sub** [1789, 1514]. **sub-additive** [1514]. **sub-diffusive** [1789]. **subalgebra** [1263, 1743]. **subalgebra-relative** [1263]. **subalgebras** [643]. **subboundary** [1730]. **Subcritical** [1430, 579, 653]. **subfactors** [29]. **sublinear** [712]. **subluminality** [600]. **submanifold** [1013]. **submanifolds** [1084, 1551]. **submultiplicative** [1436]. **subordinacy** [1864]. **subsets** [1642]. **subsolutions** [1186]. **subsonic** [417]. **subspaces** [1182]. **subsystems** [281]. **subtraction** [621]. **subtriples** [1719]. **subwavelength** [774]. **SUC** [159]. **suddenly** [1542]. **Sufficient** [1732]. **Sugawara** [422]. **sum** [1415, 1387, 584, 189, 269]. **summary** [1294]. **Summation** [1667]. **sums** [409, 1608, 781]. **Super** [962, 644, 340, 342, 1770, 508, 650, 1200, 1500, 108, 997, 1032]. **super-** [508]. **super-Galilean** [1032]. **super-quadratic** [1770]. **super-Yangian** [1500]. **superalgebra** [340, 28, 585, 1107, 1500]. **superalgebras** [593, 782, 997]. **Supercanonical** [1157]. **superchannels** [1083]. **superconductivity** [1797, 846]. **superconductor** [1338, 846]. **superconductor-to-superinsulator** [1338]. **superconformal** [1701]. **supercritical** [1657, 208, 1378, 1488, 843, 120]. **superfluid** [377]. **superhelices** [832]. **superinsulator** [1338]. **superintegrability** [1456]. **Superintegrable** [685, 1596, 39, 432, 1292, 375]. **superlinear** [1729, 484]. **supermechanics** [1151]. **superposed** [1273]. **Superposition** [1168, 101, 1838]. **superpositions** [591]. **supersonic** [1597]. **superspace** [365]. **superstring** [557]. **Supersymmetric** [211, 738, 134, 665, 187, 510, 343, 764, 361]. **supersymmetry** [1151, 494]. **supertranslation** [1672]. **supported** [872, 1287]. **surface** [763, 1631, 287, 608, 1142, 1057, 1711, 1683, 1794, 540]. **surfaces** [1543, 1006, 1538, 1861, 1104, 1595, 1749, 1825, 791, 1167, 1866, 1466, 457]. **survey** [1098]. **susceptibility** [1643]. **susceptible** [1325]. **Susskind** [668].

swarm [103]. **swelling** [306, 456, 876]. **Swift** [291, 815]. **swirl** [1422].
switching [184, 1280]. **symbols** [1372, 1388]. **Symmetric**
 [767, 1290, 1499, 190, 304, 1664, 1166, 643, 1089, 910, 446, 970, 1126, 866, 468,
 123, 338, 1770, 362, 786, 1232, 77, 572, 1133, 1076, 133, 1782, 998, 453, 628,
 794, 1634, 192, 1604, 1067, 1577, 161, 803]. **symmetrically** [1291].
Symmetries [251, 764, 721, 562, 115, 900, 1288, 720, 1875, 685, 114, 465, 972,
 381, 1674, 1404, 316, 8, 1443, 1753, 5, 6, 399, 71, 449]. **Symmetry**
 [570, 13, 54, 599, 416, 593, 154, 298, 661, 1359, 513, 1169, 1786, 224, 1192,
 1835, 1822, 1301, 938, 1783, 50, 1749, 1836, 433, 1743, 439, 1505, 925, 31].
symmetry-based [154]. **symmetry/subalgebra** [1743]. **Symplectic**
 [281, 1410, 695, 295, 527, 159, 1708, 1177, 1256]. **symplectic-Nijenhuis**
 [1177]. **symplectic/orthogonal** [1256]. **synchronized** [1428].
Synchronous [503, 137, 920]. **Synthesis** [401]. **synthetic** [1316]. **system**
 [1482, 1574, 1824, 862, 248, 1099, 1851, 219, 172, 311, 840, 1299, 336, 1533,
 1103, 1214, 1463, 692, 205, 577, 951, 1191, 1746, 503, 995, 1490, 1139, 1600,
 866, 1676, 842, 1809, 1733, 1171, 59, 488, 934, 1301, 1209, 693, 57, 816, 1216,
 1275, 1335, 1534, 699, 598, 1141, 1690, 1674, 1700, 157, 730, 1120, 1549, 209,
 1692, 227, 133, 656, 818, 1803, 1562, 533, 122, 1866, 669, 739, 262, 80, 1295,
 32, 1379, 1634, 1856, 314, 1210, 1127, 1425, 1599, 978, 1100, 1844, 353, 534,
 939, 1247, 1046, 1728, 1811, 1842, 1426, 155, 729, 1310, 1441, 689, 532, 841,
 1478, 1641, 161, 1240, 1659, 247, 937, 988]. **Systems**
 [879, 1187, 213, 135, 785, 308, 993, 438, 1410, 563, 619, 860, 411, 1522, 154,
 1538, 946, 1479, 761, 333, 431, 1506, 549, 1497, 136, 1244, 1650, 798, 254, 367,
 127, 289, 340, 421, 685, 1766, 1243, 758, 1786, 1385, 169, 1174, 1793, 207, 319,
 696, 1156, 1529, 826, 865, 524, 293, 1637, 1270, 1026, 588, 17, 1794, 212, 1322,
 553, 648, 1503, 1596, 432, 1292, 400, 1285, 1831, 1881, 506, 607, 1408, 776,
 1051, 1814, 716, 1190, 747, 1186, 1234, 270, 703, 469, 12, 203, 1394, 1395,
 1428, 399, 221, 39, 1565, 1197, 1844, 996, 1457, 1882, 435, 483]. **systems**
 [1215, 1732, 1445, 271, 562, 923, 390]. **Szego** [1352]. **Szego-type** [1352].
Szekeres [699].

T2 [1575]. **tactic** [868]. **Takiff** [422, 1603]. **tales** [904]. **Tangherlini**
 [606, 14]. **tau** [462, 1370]. **tau-functions** [462]. **Taub** [722, 365]. **taxis**
 [1809]. **TBG** [1761]. **technique** [719]. **techniques** [1681]. **Teichmüller**
 [1588]. **Teleparallel** [1359, 595, 1554]. **temperature**
 [420, 575, 45, 1520, 379, 957, 1692, 460, 899]. **temperature-dependent**
 [1692]. **temperature-depending** [420]. **Temporal** [19, 1640]. **tension**
 [608, 540]. **tensor**
 [971, 1039, 1106, 126, 1182, 757, 1401, 1812, 331, 241, 745, 880, 1458].
tensorial [1671]. **term**
 [502, 477, 1344, 156, 109, 866, 357, 387, 202, 1140, 1283]. **terms**
 [1631, 1729, 456, 1393, 484, 200]. **ternary** [1251]. **test** [740]. **Teukolsky**
 [347]. **th** [1386, 1448]. **their** [1745, 1481, 364, 1287, 513, 1812, 1707, 574, 148,
 128, 465, 1386, 1158, 595, 129, 998, 1740, 666, 1233, 1541, 1868]. **theorem**

[1421, 772, 411, 344, 66, 482, 879, 864, 1829, 1156, 104, 1305, 896, 617, 892, 77, 1138, 656, 1508, 102, 1221, 958, 39, 1152, 1181]. **theorems** [709, 382, 336, 1075, 1274, 891, 38, 1336, 1375]. **theoretic** [1845, 623, 1548]. **theoretical** [281]. **theories** [1552, 567, 790, 510, 1219, 952, 85, 851, 38, 1743, 1416, 252, 1356]. **theory** [1567, 1862, 1096, 1816, 1165, 1631, 1111, 1622, 887, 1407, 1182, 1660, 1093, 295, 490, 635, 1045, 799, 626, 882, 1055, 592, 42, 691, 1243, 501, 30, 611, 767, 1450, 1717, 1390, 509, 894, 1787, 1865, 1400, 1584, 274, 50, 410, 194, 1613, 789, 998, 1762, 1860, 791, 153, 1817, 1098, 285, 1420, 1455, 1127, 1184, 636, 536, 974, 1541, 923]. **There** [980]. **Thermal** [771, 1668, 541, 1833, 313, 1051, 1220]. **thermodiffusion** [1103]. **Thermodynamic** [705, 853, 543, 858, 1815, 1013, 879, 1278, 1281]. **thermodynamics** [65, 1272, 1281, 289, 1328, 1560]. **thermoelastic** [1530]. **thermoelasticity** [1852]. **thermostated** [259]. **thermostatistics** [1368]. **theta** [1388]. **thin** [395, 473, 1698, 374, 1516, 978, 1478]. **thin-film-type** [1698]. **thin-sandwich** [395]. **third** [706, 896, 1562]. **third-order** [706, 1562]. **Thirring** [1874, 201]. **Thomas** [56, 1029]. **Thompson** [1041]. **Thorpe** [1525]. **three** [502, 993, 1745, 557, 1227, 1136, 1154, 1266, 629, 55, 1021, 1072, 1596, 1692, 432, 1292, 1758, 1167, 765, 480, 1024, 614]. **three-body** [1021, 1072]. **three-component** [55, 765]. **three-dimensional** [1227, 1136, 629, 1692, 432, 1292, 1167, 480, 1024, 614]. **three-parameter** [1745]. **three-spin** [1758]. **three-term** [502]. **Threshold** [1245, 309, 1099]. **thresholds** [1308]. **Thurston** [1588]. **Tight** [832, 1861]. **tiling** [1418]. **Tilings** [674, 1122]. **Time** [1484, 477, 960, 84, 601, 136, 1707, 4, 323, 384, 1509, 382, 1745, 190, 1827, 862, 499, 168, 719, 1078, 356, 474, 762, 1114, 234, 92, 1496, 1172, 156, 1524, 949, 1251, 1878, 9, 835, 1126, 81, 40, 1873, 758, 387, 576, 207, 801, 97, 826, 865, 710, 509, 374, 1854, 1720, 1044, 977, 1245, 1558, 1731, 649, 1536, 1666, 1202, 1782, 829, 456, 732, 1054, 1652, 167, 849, 351, 1379, 1336, 2, 1283, 1029, 1564, 1465, 1616, 1024, 1445, 566, 913, 614, 354, 1240, 1309, 1668]. **time-decay** [1465]. **time-delayed** [40]. **Time-dependent** [477, 4, 323, 384, 92, 1172, 97, 826, 865, 1044, 1245, 1029]. **time-domain** [1524]. **time-evolution** [1078]. **time-fractional** [9, 835, 1873]. **Time-frequency** [1484]. **time-inhomogeneous** [566]. **time-like** [1509]. **Time-optimal** [136]. **time-periodic** [949, 1309]. **time-space** [758]. **time-symmetric** [1782]. **time-variable** [1078]. **time-varying** [474, 374]. **timelike** [1826, 1863]. **times** [426]. **timescale** [1688, 1644]. **Timoshenko** [156, 1031]. **Toda** [1198, 1333, 749, 1776, 985, 553, 1149]. **Toda-** [1149]. **Toeplitz** [78]. **Toledo** [362]. **tomogram** [322]. **tool** [1093]. **top** [1800]. **Topics** [929]. **topography** [1651]. **Topological** [1383, 1861, 1717, 791, 1455, 191, 971, 1037, 1111, 1763, 166, 73, 1338, 1411, 429, 1798, 1258, 1156, 1686, 171, 157, 1470, 337, 1817, 1217, 1420, 366, 1160, 1356]. **Topologically** [565, 228]. **Topology** [1794, 1316, 1267, 1830, 821, 1167, 1634]. **tori**

[259, 182, 780, 458, 987, 102, 1492, 1234, 1457]. **toric** [169, 1749, 1548, 1434].
toroidal [495, 1312, 760, 1492, 1773]. **torsion** [629, 38, 595, 789, 1553].
tortoise [848]. **torus** [1827, 1097, 1049, 978, 1434]. **total** [1309]. **Townsend**
 [635]. **toy** [897]. **Trace** [1452, 113, 1041, 468, 1264, 102, 131, 138]. **tracers**
 [142]. **traces** [674]. **tracial** [1264]. **tracks** [1038]. **traffic** [1302, 1432].
trajectories [1744]. **trajectory** [1253]. **Transcendental** [1781]. **transfer**
 [214]. **transform** [783, 1484, 296, 649]. **Transformation**
 [571, 1195, 1752, 111, 1651, 994]. **transformations**
 [570, 1410, 1291, 1320, 1561, 972, 714, 1666, 641, 266, 79, 716, 108, 1856, 889].
transforms [1459, 249, 759, 322, 829]. **Transition**
 [133, 547, 1338, 339, 524, 176]. **transitions** [798, 1040, 300, 926, 899].
Transitive [1780]. **transitivity** [373]. **Translating** [969]. **translation**
 [763, 429, 666]. **translations** [780]. **transmission** [177, 1323].
transmutation [255]. **Trasonic** [1494, 1577]. **transport**
 [415, 1859, 644, 1858, 688, 605, 1519, 521, 1074, 212, 1470, 74].
transportation [1202]. **transpose** [1317]. **transposes** [178]. **transverse**
 [264, 1591, 45]. **trapezoids** [583]. **Trapped** [543, 244, 990, 1711, 1551].
trapping [1488]. **traps** [602, 492]. **Travel** [426]. **Traveling**
 [1811, 701, 1879, 18, 908, 1535, 911, 1724, 578, 534, 1325]. **traversable** [1437].
tree [300]. **trees** [544, 68, 1475]. **Triangles** [602]. **triangular** [863, 125].
triangulations [346]. **trigonometric** [469, 107]. **trimmed** [1858]. **triple**
 [930, 1497, 963, 1562]. **triple-pole** [1562]. **triples** [1199, 1163, 714]. **Trivial**
 [743, 1095, 1404, 1133, 1076]. **trivialization** [971]. **tropical** [169].
Truncated [1396]. **Tu** [1131]. **tube** [1879]. **tubes** [701]. **tumor** [1799].
Tuning [1741]. **Tunneling** [1392]. **turbulence** [43, 104, 613, 1866].
turbulent [773, 275]. **Twelve** [904]. **twist** [1638]. **Twisted**
 [736, 555, 495, 640, 48, 714, 1377, 672, 1580]. **twistor** [1517]. **Two**
 [1621, 1874, 1154, 727, 1751, 1228, 108, 1610, 1372, 541, 1365, 110, 676, 1052,
 860, 84, 1078, 333, 431, 1299, 1883, 1288, 967, 1136, 1124, 1823, 205, 808, 408,
 109, 1291, 45, 140, 1442, 429, 655, 777, 1756, 1236, 1192, 1767, 10, 124, 1582, 957,
 293, 454, 816, 60, 393, 119, 170, 194, 133, 1838, 1762, 176, 533, 1817, 231, 819,
 770, 1102, 1802, 1799, 869, 353, 152, 534, 315, 165, 1247, 1842, 1804, 23, 1356].
two-body [1124]. **two-component** [1299, 777, 1756, 152, 534, 1247].
two-cut [1052]. **Two-dimensional** [1228, 676, 860, 1078, 1288, 967, 1291,
 429, 124, 170, 194, 819, 1102, 1802, 1799, 315, 23, 1356]. **Two-electron**
 [1154]. **two-interval** [1762]. **two-layer** [1442]. **two-level** [408, 133, 176].
Two-parameter [727]. **two-periodic** [1365]. **two-phase**
 [205, 1767, 231, 770, 1804]. **two-photon** [1582]. **two-point**
 [541, 110, 45, 1236]. **Two-sided** [1874]. **two-site** [1192]. **two-soliton** [1842].
two-species [1136, 816, 533, 353]. **two-spin** [957]. **two-term** [109]. **Tye**
 [1401]. **type**
 [396, 1646, 392, 1421, 382, 676, 297, 713, 643, 1573, 115, 311, 376, 1023, 1342,
 1883, 1346, 1713, 1841, 446, 1244, 1650, 1411, 927, 482, 877, 1657, 111, 870, 834,
 1810, 340, 296, 1698, 1829, 1786, 114, 357, 647, 795, 19, 737, 55, 372, 813, 896,

1216, 1274, 891, 1347, 1722, 1699, 1535, 17, 1257, 77, 1014, 26, 445, 1831, 748, 8, 963, 193, 1488, 122, 1049, 262, 1149, 484, 5, 6, 1336, 1565, 16, 578, 531, 1454, 483, 1239, 1375, 199, 418, 1173, 1086, 1659, 1863, 1027, 321, 691, 764, 1352].
types [1621, 128, 1751, 149].

ubiquitous [502]. **Uglov** [1022]. **Uhlenbeck** [830, 1018, 1323, 1335, 1128, 1636, 1641]. **Ultra** [1470]. **Ultra-generalized** [1470]. **Ultradiscrete** [400, 749, 1831]. **ultrametricity** [335].
ultraspherical [145]. **unavoidable** [111]. **unbounded** [1827, 369, 420, 473, 1351, 198, 1516, 453, 935, 222, 750, 460, 161].
Uncertainty [649, 829, 297, 1684, 1355, 545, 252]. **underlying** [1002].
unextended [113]. **Unextendible** [1262]. **uniaxially** [321]. **unified** [1513].
Uniform [267, 1591, 205, 1188, 1003, 747, 1361, 873, 11, 197, 1840, 663, 879, 224, 1160, 1237, 1569, 839]. **uniformly** [303]. **unifying** [1371]. **Unique** [1691]. **Uniqueness** [912, 1797, 1689, 1367, 1807, 1883, 798, 492, 1536, 1384, 1649, 1806]. **unit** [1326, 1399, 402, 64]. **unitaries** [949]. **unitarity** [590]. **Unitary** [501, 1646, 246, 767, 637, 1735, 1238, 253, 505, 1521, 529]. **units** [1223].
Universal [101, 68, 845, 1621, 317, 1264, 348, 1239]. **Universality** [847].
universe [1837]. **unknown** [1595, 1019]. **unlabeled** [1419]. **unravelings** [83, 1203]. **unsharp** [1668]. **unstable** [1013, 1439, 419]. **unsteady** [1102].
Upper [688, 815, 1071, 1236, 310, 303, 540, 170]. **upper-right** [310]. **Uq** [1619]. **use** [666]. **using** [719, 808, 1094, 296, 832, 10, 186, 342, 1817, 1190, 794, 703]. **USp** [345].
Uvarov [808, 10].

V [911, 1521]. **V-shaped** [911]. **vacuum** [1008, 992, 577, 629, 1614, 1207, 352, 1209, 1695, 302, 1838, 1248, 180, 453, 628, 1302, 1343, 480, 871, 23].
Vaisman [50]. **vakonomic** [1786]. **valence** [1389]. **valence-bond-solid** [1389]. **Validity** [1339, 383]. **value** [1011, 969, 85, 1141, 953]. **valued** [1230, 1388, 99, 1740, 907, 646, 1555]. **Vandermonde** [1116]. **vanishes** [1767]. **Vanishing** [1276, 936, 122, 723, 1468, 1690, 935, 1423, 1847]. **vapor** [1651, 994]. **Variable** [204, 304, 1078, 1730, 296, 1109, 478, 119, 1700, 419, 975, 1705].
Variable-order [204]. **variables** [13, 54, 933, 1112, 268, 646, 1149, 1393, 1721]. **variants** [1388]. **variation** [1122]. **Variational** [143, 407, 788, 330, 1481, 1710, 912, 1320, 1079, 1557, 1679, 1138, 1514].
varieties [1595, 929]. **Various** [1079, 169, 1645]. **varying** [474, 374, 1324].
vector [396, 1509, 1663, 634, 1764, 567, 256, 861, 885, 1720, 1492]. **vectorial** [1728]. **vectors** [1022, 439]. **velocity** [706, 1066, 1577, 1576]. **Venant** [122].
Verification [676]. **version** [1014, 1283, 1784]. **Vertex** [1857, 495, 1130, 1153, 1069, 27, 140, 1812, 128]. **vertical** [905, 1575]. **very** [601]. **Veselov** [1842]. **VI** [149]. **via** [134, 1619, 1242, 709, 1593, 78, 513, 1675,

995, 1689, 657, 402, 362, 521, 1720, 1317, 1749, 1785, 1762, 958]. **vibrios** [1640]. **view** [885]. **viewpoint** [799]. **Villain** [790]. **Violation** [740]. **Virasoro** [1812, 1485]. **virial** [476]. **viscoelastic** [1789, 1342, 612, 1493, 1431, 200, 1031]. **viscoelasticity** [517]. **Viscosity** [1186, 1863, 1276, 420, 838, 1442, 352, 615, 1690, 1692, 933, 1803, 122, 975, 61, 942, 450, 1569, 464, 582, 1576]. **Viscous** [60, 1808, 600, 608, 19, 1690, 167, 1295, 1769, 1616, 460, 1309]. **Vladimirov** [1705]. **Vlasov** [486, 1379, 773, 172, 1460, 1141, 209, 486, 1341, 1634, 1100, 353]. **Vogel** [715]. **Voigt** [237]. **Volterra** [1392, 1335]. **volume** [986, 818]. **volume-filling** [818]. **volumes** [1861, 760]. **Vortex** [1030, 12, 80, 315, 1276, 601, 1444, 510, 1517, 1138, 1049, 377, 538, 1457]. **vortic** [705]. **vortices** [142, 166, 1176, 805, 76]. **vortices-antivortices** [166]. **Vorticity** [1167, 601, 1839, 1049]. **Vries** [811, 1623]. **vs** [1218, 1288, 816, 1316, 847, 641].

W [361]. **W-algebras** [361]. **Waals** [339, 1507, 1535]. **Waals-type** [1535]. **walk** [251, 336, 892, 1237]. **Walker** [1129, 272]. **walks** [800, 624, 1409, 1196, 1286, 901]. **wall** [1162, 500, 312, 1486]. **walls** [1883]. **Wannier** [385, 3, 1686, 171, 1470]. **Wasserstein** [892]. **Wasserstein-1** [892]. **water** [720, 797, 1695, 1651, 994, 1806]. **Wave** [1640, 163, 1064, 1567, 491, 1574, 912, 1010, 356, 182, 1342, 1344, 1299, 1855, 233, 734, 206, 701, 1879, 600, 1246, 421, 947, 18, 866, 608, 414, 352, 274, 1202, 1405, 419, 227, 748, 1208, 1318, 130, 272, 141, 332, 631, 750, 824, 1725, 1269, 200, 1325, 1429]. **wave-like** [748]. **wave-particle** [947]. **Wavefunctions** [173, 1154, 666]. **waveguide** [48]. **wavelet** [297, 1484]. **Waves** [1837, 1567, 1231, 1533, 780, 208, 1726, 90, 1490, 680, 1614, 1168, 908, 1535, 1480, 1714, 257, 202, 700, 616, 1724, 534, 1811, 271, 71]. **way** [1049]. **WDVV** [469]. **Weak** [1029, 1260, 773, 1136, 837, 777, 812, 1385, 1529, 932, 888, 20, 905, 1213, 1307, 641, 427, 61, 731, 1465, 165, 1204, 1024, 841, 278, 1806, 1850]. **Weak/** [1850]. **weakly** [1020, 388, 1536, 1429]. **weather** [1567]. **Wei** [249]. **weight** [568, 118, 1523, 226]. **weighted** [1187, 1365, 51, 1763, 762, 1150, 1333, 1637, 1213, 1536, 553, 976]. **weights** [814]. **Weil** [986, 1861]. **Weil-Petersson** [986]. **Weinstein** [1830]. **Weizsäcker** [56]. **welding** [263]. **Well** [1362, 59, 1803, 235, 244, 276, 1424, 1023, 660, 577, 1600, 55, 905, 1209, 693, 1467, 1625, 994, 1549, 1061, 1692, 1070, 153, 1353, 1140, 203, 975, 1343, 996, 480, 534, 871, 1025, 1426, 199, 418, 1310, 1723, 1804, 1576]. **Well-posedness** [1362, 59, 1803, 235, 660, 577, 1600, 55, 905, 1209, 1467, 1625, 994, 1549, 1692, 1140, 975, 1343, 480, 534, 871, 1025, 1426, 199, 1310, 1723, 1804, 1576]. **Werner** [1221]. **Weyl** [1260, 1153, 109, 1742, 478, 1290, 1550, 781, 125, 131]. **Which** [898, 1220, 932, 888]. **white** [1626, 1174, 1793, 1703, 1880]. **Whitham** [534]. **Whittaker** [1648]. **whole** [977]. **Wick** [1436]. **Wick-ordered** [1436]. **wide** [927]. **Wiechert** [404]. **Wigner** [1372, 919, 711, 1611, 245, 787].

Wilczek [504]. **Willmore** [974]. **Wilson** [1035, 95, 186, 342, 32]. **Wilsonian** [897]. **Winding** [1350, 1581]. **wires** [1762, 771]. **wiretap** [1161]. **wise** [984]. **with/without** [1569]. **within** [1584]. **without** [1298, 1136, 1297, 1137, 608, 905, 1833, 1492, 399, 1569, 540, 1308, 452]. **Witt** [1095, 743]. **Witten** [1111, 558, 1751]. **WKB** [448, 1567, 143, 25, 633]. **Wolfes** [1736]. **Wong** [1147, 632, 1215, 689, 1880]. **Woods** [830]. **Work** [435]. **wormholes** [1437]. **Wronskian** [79]. **WZW** [1670].

X [280]. **X2** [317]. **XX** [45]. **XXZ** [784, 1628, 645]. **XY** [565, 300]. **XY-interactions** [300].

Yaglom [739]. **Yamabe** [514]. **Yang** [1549, 1712, 570, 1006, 1134, 1314, 1349, 1068, 715, 343, 1373, 958, 968, 915, 594, 1092]. **Yangian** [128, 1500, 618, 1277, 1578]. **Yangians** [997, 1294]. **Yau** [139]. **Ye** [1192, 242]. **Yukawa** [1399].

Z [1598]. **Z2** [1619]. **Zakai** [1147, 632, 1215, 689, 1880]. **Zakharov** [1490, 160, 1170, 1728]. **Zamolodchikov** [292]. **Zee** [504]. **Zehnder** [1518]. **Zeno** [847]. **Zero** [397, 1477, 352, 437, 520, 3, 385, 1791, 286, 1226, 1293, 1850, 598, 963, 1248, 1562, 1234, 1422, 23, 1206]. **zero-average** [1234]. **zero-gravity** [1226, 1293]. **zero-Hausdorff** [437]. **Zero-Hopf** [1477, 598]. **Zero-Mach** [1206]. **zero-pressure** [520]. **Zero-viscosity-capillarity** [352]. **zero/nonzero** [963, 1562]. **zeros** [145, 223, 859]. **Zeta** [1870, 1751, 863, 1132, 899]. **zigzag** [1471, 759]. **zilch** [403]. **ZN** [1434]. **Zoll** [198]. **Zwanzig** [807]. **Zybin** [581].

References

Johnson:1979:RRC

- [1] Bruce R. Johnson and Joseph O. Hirschfelder. The radial reduced Coulomb Green's function. *Journal of Mathematical Physics*, 20(12): 2484–2501, December 1979. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL http://jmp.aip.org/resource/1/jmapaq/v20/i12/p2484_s1. See erratum [479].

VonZuben:2000:QTS

- [2] Francis S. G. Von Zuben. Quantum time and spatial localization: an analysis of the Hegerfeldt paradox. *Journal of Mathematical Physics*, 41(9):6093–6115, September 2000. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See comment [351].

DeNittis:2011:ELW

- [3] G. De Nittis and M. Lein. Exponentially localized Wannier functions in periodic zero flux magnetic fields. *Journal of Mathematical Physics*,

52(11):112103, November 2011. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL http://jmp.aip.org/resource/1/jmapaq/v52/i11/p112103_s1. See erratum [385].

Macedo:2012:TDC

- [4] D. X. Macedo and I. Guedes. Time-dependent coupled harmonic oscillators. *Journal of Mathematical Physics*, 53(5):052101, May 2012. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL http://jmp.aip.org/resource/1/jmapaq/v53/i5/p052101_s1. See [384].

Tiwari:2013:CLP

- [5] Ajey K. Tiwari, S. N. Pandey, M. Senthilvelan, and M. Lakshmanan. Classification of Lie point symmetries for quadratic Liénard type equation $\ddot{x} + f(x)\dot{x}^2 + g(x) = 0$. *Journal of Mathematical Physics*, 54(5):053506, May 2013. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See erratum [6], comments [8, 114], and response [115].

Tiwari:2014:ECL

- [6] Ajey K. Tiwari, S. N. Pandey, M. Senthilvelan, and M. Lakshmanan. Erratum: “Classification of Lie point symmetries for quadratic Liénard type equation $\ddot{x} + f(x)\dot{x}^2 + g(x) = 0$ ” [J. Math. Phys. **54**, 053506 (2013)]. *Journal of Mathematical Physics*, 55(5):059901, May 2014. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [5] and comment [8].

Fonseca:2015:QAM

- [7] I. C. Fonseca and K. Bakke. Quantum aspects of a moving magnetic quadrupole moment interacting with an electric field. *Journal of Mathematical Physics*, 56(6):062107, June 2015. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See comment [447].

Paliathanasis:2016:CCL

- [8] A. Paliathanasis and P. G. L. Leach. Comment on “Classification of Lie point symmetries for quadratic Liénard type equation $\ddot{x} + f(x)\dot{x}^2 + g(x) = 0$ ” [j. math. phys. **54**, 053506 (2013)] and its erratum [j. math. phys. **55**, 059901 (2014)]. *Journal of Mathematical Physics*, 57(2):024101, February 2016. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [5].

Giusti:2018:DRT

- [9] Andrea Giusti. Dispersion relations for the time-fractional Cattaneo–Maxwell heat equation. *Journal of Mathematical Physics*, 59(1):013506, January 2018. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See erratum [835].

Karayer:2018:SSE

- [10] H. Karayer, D. Demirhan, and F. Büyükkiliç. Solution of Schrödinger equation for two different potentials using extended Nikiforov–Uvarov method and polynomial solutions of biconfluent Heun equation. *Journal of Mathematical Physics*, 59(5):053501, May 2018. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See comment [808].

Falek:2019:BOU

- [11] M. Falek, M. Merad, and M. Moumni. Bosonic oscillator under a uniform magnetic field with Snyder-de Sitter algebra. *Journal of Mathematical Physics*, 60(1):013505, January 2019. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See erratum [197].

Sulaiman:2019:VPP

- [12] Samira Alamin Sulaiman. Vortex patch problem for Euler–Boussinesq systems. *Journal of Mathematical Physics*, 60(1):013506, January 2019. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See erratum [80].

Helland:2019:SSC

- [13] Inge S. Helland. Symmetry in a space of conceptual variables. *Journal of Mathematical Physics*, 60(5):052101, May 2019. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See erratum [54].

Fox:2019:MHS

- [14] Matthew S. Fox. Multipole hair of Schwarzschild–Tangherlini black holes. *Journal of Mathematical Physics*, 60(10):102502, October 2019. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See retraction [606].

Solovej:2020:RA

- [15] Jan Philip Solovej. Referee acknowledgment for 2019. *Journal of Mathematical Physics*, 61(1):010201, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2020:LES

- [16] Da-Bin Wang. Least energy sign-changing solutions of Kirchhoff-type equation with critical growth. *Journal of Mathematical Physics*, 61(1):011501, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Maia:2020:CHC

- [17] B. B. V. Maia and O. H. Miyagaki. On a class of Hamiltonian Choquard-type elliptic systems. *Journal of Mathematical Physics*, 61(1):011502, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

He:2020:STW

- [18] Chun-Lei He, Shou-Jun Huang, and Changhua Wei. Stability of traveling wave for the relativistic string equation in de Sitter spacetime. *Journal of Mathematical Physics*, 61(1):011503, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kim:2020:TDS

- [19] Jae-Myoung Kim. Temporal decay of strong solutions to the magneto-hydrodynamics with power-law type nonlinear viscous fluid. *Journal of Mathematical Physics*, 61(1):011504, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lee:2020:MWS

- [20] Jun Ik Lee, Jae-Myoung Kim, Yun-Ho Kim, and Jongrak Lee. Multiplicity of weak solutions to non-local elliptic equations involving the fractional $p(x)$ -Laplacian. *Journal of Mathematical Physics*, 61(1):011505, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Xu:2020:GEA

- [21] Qiuju Xu, Zhong Tan, and Huaqiao Wang. Global existence and asymptotic behavior for the 3D compressible magneto-micropolar fluids in a bounded domain. *Journal of Mathematical Physics*, 61(1):011506, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Qu:2020:HMN

- [22] Aifang Qu, Hairong Yuan, and Qin Zhao. High Mach number limit of one-dimensional piston problem for non-isentropic compressible Euler equations: Polytopic gas. *Journal of Mathematical Physics*, 61(1):

011507, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhong:2020:SSC

- [23] Xin Zhong. Strong solutions to the Cauchy problem of two-dimensional compressible non-isothermal nematic liquid crystal flows with vacuum and zero heat conduction. *Journal of Mathematical Physics*, 61(1):011508, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bao:2020:SLL

- [24] Sijia Bao, Denis Constaes, Hendrik De Bie, and Teppo Mertens. Solutions for the Lévy–Leblond or parabolic Dirac equation and its generalizations. *Journal of Mathematical Physics*, 61(1):011509, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fujiie:2020:SWP

- [25] Setsuro Fujiie and Spyridon Kamvissis. Semiclassical WKB problem for the non-self-adjoint Dirac operator with analytic potential. *Journal of Mathematical Physics*, 61(1):011510, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See publisher’s note [448].

Morioka:2020:NSE

- [26] Hisashi Morioka and Naotaka Shoji. Non-scattering energies for acoustic-type equations on manifolds with a single flat end. *Journal of Mathematical Physics*, 61(1):011511, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

DeSole:2020:SQV

- [27] Alberto De Sole, Matteo Gardini, and Victor G. Kac. On the structure of quantum vertex algebras. *Journal of Mathematical Physics*, 61(1):011701, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Isaac:2020:GGL

- [28] Phillip S. Isaac, N. I. Stoilova, and Joris Van der Jeugt. The $\mathbf{Z}_2 \times \mathbf{Z}_2$ -graded general linear Lie superalgebra. *Journal of Mathematical Physics*, 61(1):011702, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

De:2020:QDI

- [29] Sandipan De. Quantum double inclusions associated to a family of Kac algebra subfactors. *Journal of Mathematical Physics*, 61(1):011703, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hu:2020:QHB

- [30] Zhi Hu and Pengfei Huang. Quivers from Higgs bundles over \mathbf{P}^1 and quiver gauge theory. *Journal of Mathematical Physics*, 61(1):011704, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2020:PSE

- [31] Ruili Zhang, Hong Qin, and Jianyuan Xiao. PT-symmetry entails pseudo-Hermiticity regardless of diagonalizability. *Journal of Mathematical Physics*, 61(1):012101, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Taiwo:2020:PFW

- [32] T. J. Taiwo. Potential function of the Wilson–Racah quantum system. *Journal of Mathematical Physics*, 61(1):012102, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Szmytkowski:2020:ACS

- [33] Radosław Szmytkowski. Analytical calculations of scattering lengths for a class of long-range potentials of interest for atomic physics. *Journal of Mathematical Physics*, 61(1):012103, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ge:2020:HAF

- [34] Yimin Ge and Vedran Dunjko. A hybrid algorithm framework for small quantum computers with application to finding Hamiltonian cycles. *Journal of Mathematical Physics*, 61(1):012201, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Penna:2020:OM

- [35] Robert Penna. $\text{SDiff}(S^2)$ and the orbit method. *Journal of Mathematical Physics*, 61(1):012301, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Feigin:2020:X

- [36] Boris Feigin and Sergei Gukov. VOA[M_4]. *Journal of Mathematical Physics*, 61(1):012302, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Llibre:2020:PSR

- [37] Jaume Llibre and Amar Makhlof. On the periodic solutions of the relativistic driven harmonic oscillator. *Journal of Mathematical Physics*, 61(1):012501, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Luz:2020:STI

- [38] Paulo Luz and Filipe C. Mena. Singularity theorems and the inclusion of torsion in affine theories of gravity. *Journal of Mathematical Physics*, 61(1):012502, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Tsiganov:2020:SSR

- [39] A. V. Tsiganov. Superintegrable systems and Riemann–Roch theorem. *Journal of Mathematical Physics*, 61(1):012701, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ha:2020:EDL

- [40] Seung-Yeal Ha, Doheon Kim, Dohyun Kim, Hansol Park, and Woojoo Shim. Emergent dynamics of the Lohe matrix ensemble on a network under time-delayed interactions. *Journal of Mathematical Physics*, 61(1):012702, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Burby:2020:GCD

- [41] J. W. Burby. Guiding center dynamics as motion on a formal slow manifold in loop space. *Journal of Mathematical Physics*, 61(1):012703, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Grillo:2020:EHJ

- [42] Sergio Grillo and Edith Padrón. Extended Hamilton–Jacobi theory, contact manifolds, and integrability by quadratures. *Journal of Mathematical Physics*, 61(1):012901, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Flandoli:2020:ECM

- [43] Franco Flandoli and Dejun Luo. Energy conditional measures and 2D turbulence. *Journal of Mathematical Physics*, 61(1):013101, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Murphy:2020:SAC

- [44] N. B. Murphy, E. Cherkaev, J. Zhu, J. Xin, and K. M. Golden. Spectral analysis and computation for homogenization of advection diffusion processes in steady flows. *Journal of Mathematical Physics*, 61(1):013102, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Gohmann:2020:HTA

- [45] Frank Göhmann, Karol K. Kozłowski, and Junji Suzuki. High-temperature analysis of the transverse dynamical two-point correlation function of the XX quantum-spin chain. *Journal of Mathematical Physics*, 61(1):013301, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Cutimanco:2020:EEH

- [46] Miguel Cutimanco and Vasilisa Shramchenko. Explicit examples of Hurwitz Frobenius manifolds in genus one. *Journal of Mathematical Physics*, 61(1):013501, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Machida:2020:BSP

- [47] Manabu Machida and Gen Nakamura. Born series for the photon diffusion equation perturbing the Robin boundary condition. *Journal of Mathematical Physics*, 61(1):013502, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Briet:2020:ACS

- [48] Ph. Briet, J. Dittrich, and D. Krejčířík. Absolute continuity of the spectrum in a twisted Dirichlet–Neumann waveguide. *Journal of Mathematical Physics*, 61(1):013503, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zuniga-Galindo:2020:NAC

- [49] W. A. Zúñiga-Galindo and Sergii M. Torba. Non-Archimedean Coulomb gases. *Journal of Mathematical Physics*, 61(1):013504, January 2020.

CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Mori:2020:DAV

- [50] Haruka Mori, Shin Sasaki, and Kenta Shiozawa. Doubled aspects of Vaisman algebroid and gauge symmetry in double field theory. *Journal of Mathematical Physics*, 61(1):013505, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bertola:2020:GWH

- [51] M. Bertola, J. Harnad, and B. Runov. Generating weighted Hurwitz numbers. *Journal of Mathematical Physics*, 61(1):013506, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kieu:2020:ESG

- [52] Thinh Kieu. Existence of a solution for generalized Forchheimer flow in porous media with minimal regularity conditions. *Journal of Mathematical Physics*, 61(1):013507, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chang:2020:ELC

- [53] Shuhua Chang, Tiefeng Jiang, and Yongcheng Qi. Eigenvalues of large chiral non-Hermitian random matrices. *Journal of Mathematical Physics*, 61(1):013508, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Helland:2020:ESS

- [54] Inge S. Helland. Erratum: “Symmetry in a space of conceptual variables” [J. Math. Phys. **60**(5), 052101 (2019)]. *Journal of Mathematical Physics*, 61(1):019901, January 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [13].

Li:2020:LWP

- [55] Zhigang Li and Yuxi Hu. Local well-posedness and blow-up criteria for a three-component Camassa–Holm type equation. *Journal of Mathematical Physics*, 61(2):021501, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Salazar:2020:MST

- [56] Lorena Aguirre Salazar, Stan Alama, and Lia Bronsard. Mass splitting in the Thomas–Fermi–Dirac–von Weizsäcker model with background potential. *Journal of Mathematical Physics*, 61(2):021502, February 2020. CO-

DEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Liu:2020:GSF

- [57] Dongmei Liu. Global solutions in a fully parabolic chemotaxis system with singular sensitivity and nonlinear signal production. *Journal of Mathematical Physics*, 61(2):021503, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lin:2020:SBS

- [58] Yu-Chu Lin, Haitao Wang, and Kung-Chien Wu. Spatial behavior of the solution to the linearized Boltzmann equation with hard potentials. *Journal of Mathematical Physics*, 61(2):021504, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Khochemane:2020:WPG

- [59] Housseem Eddine Khochemane, Abdelhak Djebabla, Salah Zitouni, and Lamine Bouzettouta. Well-posedness and general decay of a nonlinear damping porous-elastic system with infinite memory. *Journal of Mathematical Physics*, 61(2):021505, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ma:2020:VLC

- [60] Shixiang Ma. Viscous limits of the compressible Navier–Stokes equations to piecewise smooth solutions with two interacting out-going shocks. *Journal of Mathematical Physics*, 61(2):021506, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2020:GEW

- [61] Fengchao Wang, Changsheng Dou, and Quansen Jiu. Global existence of weak solutions to 3D compressible primitive equations with degenerate viscosity. *Journal of Mathematical Physics*, 61(2):021507, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kaygorodov:2020:DFA

- [62] Ivan Kaygorodov and Yury Volkov. Degenerations of Filippov algebras. *Journal of Mathematical Physics*, 61(2):021701, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Nam:2020:ISA

- [63] Phan Thành Nam and Nicolas Rougerie. Improved stability for 2D attractive Bose gases. *Journal of Mathematical Physics*, 61(2):021901,

February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

delOlmo:2020:CIQ

- [64] M. A. del Olmo and J. P. Gazeau. Covariant integral quantization of the unit disk. *Journal of Mathematical Physics*, 61(2):022101, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bebiano:2020:TNH

- [65] N. Bebiano, J. da Providência, and J. P. da Providência. Toward non-Hermitian quantum statistical thermodynamics. *Journal of Mathematical Physics*, 61(2):022102, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Cuesta:2020:SQD

- [66] Javier Cuesta. A stable quantum Darboux–Skitovich theorem. *Journal of Mathematical Physics*, 61(2):022201, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Dahlberg:2020:CSQ

- [67] Axel Dahlberg, Jonas Helsen, and Stephanie Wehner. Counting single-qubit Clifford equivalent graph states is $\#P$ -complete. *Journal of Mathematical Physics*, 61(2):022202, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Clavier:2020:LRU

- [68] Pierre Clavier, Li Guo, Sylvie Paycha, and Bin Zhang. Locality and renormalization: Universal properties and integrals on trees. *Journal of Mathematical Physics*, 61(2):022301, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Dossa:2020:RDP

- [69] Finagnon A. Dossa and Gabriel Y. H. Avossevou. Relativistic dynamics for a particle carrying a non-Abelian charge in a non-Abelian background electromagnetic field. *Journal of Mathematical Physics*, 61(2):022302, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Majid:2020:RQR

- [70] Shahn Majid. Reconstruction and quantization of Riemannian structures. *Journal of Mathematical Physics*, 61(2):022501, February 2020.

CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2020:SCS

- [71] P.-M. Zhang, M. Cariglia, M. Elbistan, and P. A. Horvathy. Scaling and conformal symmetries for plane gravitational waves. *Journal of Mathematical Physics*, 61(2):022502, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chernov:2020:KHC

- [72] V. Chernov, G. Martin, and I. Petkova. Khovanov homology and causality in spacetimes. *Journal of Mathematical Physics*, 61(2):022503, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

DeNittis:2020:EEM

- [73] Giuseppe De Nittis and Max Lein. Equivalence of electric, magnetic, and electromagnetic Chern numbers for topological photonic crystals. *Journal of Mathematical Physics*, 61(2):022901, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Pachev:2020:RBH

- [74] B. Pachev, J. P. Whitehead, G. Fantuzzi, and I. Grooms. Rigorous bounds on the heat transport of rotating convection with Ekman pumping. *Journal of Mathematical Physics*, 61(2):023101, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Michalak:2020:ESF

- [75] M. Michalak and B. K. Shivamoggi. Exact solutions for the fluid impulse for incompressible and compressible flows. *Journal of Mathematical Physics*, 61(2):023102, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yoon:2020:SVH

- [76] Jongbin Yoon, Habin Yim, and Sun-Chul Kim. Stuart vortices on a hyperbolic sphere. *Journal of Mathematical Physics*, 61(2):023103, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Masjed-Jamei:2020:ISO

- [77] Mohammad Masjed-Jamei, Zahra Moalemi, and Nasser Saad. Incomplete symmetric orthogonal polynomials of finite type generated by a generalized Sturm–Liouville theorem. *Journal of Mathematical Physics*, 61

(2):023501, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Durdevich:2020:CSM

- [78] Micho Durdevich and Stephen Bruce Sontz. Coherent states for the Manin plane via Toeplitz quantization. *Journal of Mathematical Physics*, 61(2):023502, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Schulze-Halberg:2020:HOD

- [79] Axel Schulze-Halberg. Higher-order Darboux transformations and Wronskian representations for Schrödinger equations with quadratically energy-dependent potentials. *Journal of Mathematical Physics*, 61(2):023503, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Sulaiman:2020:EVP

- [80] Samira Alamin Sulaiman. Erratum: “Vortex patch problem for Euler–Boussinesq system” [J. Math. Phys. **60**, 013506 (2019)]. *Journal of Mathematical Physics*, 61(2):029901, February 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [12].

Gorka:2020:ABT

- [81] Przemysław Górka, Humberto Prado, and Daniel J. Pons. The asymptotic behavior of the time fractional Schrödinger equation on Hilbert space. *Journal of Mathematical Physics*, 61(3):031501, March 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Liu:2020:EAP

- [82] Shujuan Liu. The existence of almost-periodic solutions for 1-dimensional nonlinear Schrödinger equation with quasi-periodic forcing. *Journal of Mathematical Physics*, 61(3):031502, March 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Keys:2020:PSM

- [83] Dustin Keys and Jan Wehr. Poisson stochastic master equation unravelings and the measurement problem: a quantum stochastic calculus perspective. *Journal of Mathematical Physics*, 61(3):032101, March 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See erratum [1203].

Bruschi:2020:TET

- [84] David Edward Bruschi. Time evolution of two harmonic oscillators with cross-Kerr interactions. *Journal of Mathematical Physics*, 61(3):032102, March 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Juarez-Aubry:2020:STI

- [85] Benito A. Juárez-Aubry, Tonatiuh Miramontes, and Daniel Sudarsky. Semiclassical theories as initial value problems. *Journal of Mathematical Physics*, 61(3):032301, March 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Xuan:2020:PDF

- [86] Pham Truong Xuan. Peeling of Dirac field on Kerr spacetime. *Journal of Mathematical Physics*, 61(3):032501, March 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ismail:2020:AIM

- [87] Mourad E. H. Ismail and Nasser Saad. The asymptotic iteration method revisited. *Journal of Mathematical Physics*, 61(3):033501, March 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See comment [195] and response [196].

Rougerie:2020:HQH

- [88] Nicolas Rougerie and Jakob Yngvason. Holomorphic quantum Hall states in higher Landau levels. *Journal of Mathematical Physics*, 61(4):041101, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Xi:2020:DRC

- [89] Xiaoyu Xi, Xueke Pu, and Boling Guo. Decay rates of the compressible Hall-magnetohydrodynamic model for quantum plasmas. *Journal of Mathematical Physics*, 61(4):041501, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hadadifard:2020:SRR

- [90] Fazel Hadadifard and Atanas G. Stefanov. Sharp relaxation rates for plane waves of general reaction-diffusion models. *Journal of Mathematical Physics*, 61(4):041502, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bian:2020:GSM

- [91] Xingzhi Bian and Liping Luan. Global solutions to a model with Dirichlet boundary conditions for interface motion by interface diffusion. *Journal of Mathematical Physics*, 61(4):041503, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Deng:2020:ASM

- [92] Qingquan Deng and Xiaohua Yao. Asymptotic stability of multi-soliton solutions for nonlinear Schrödinger equations with time-dependent potential. *Journal of Mathematical Physics*, 61(4):041504, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

DeGregorio:2020:RFC

- [93] Alessandro De Gregorio and Enzo Orsingher. Random flights connecting porous medium and Euler–Poisson–Darboux equations. *Journal of Mathematical Physics*, 61(4):041505, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Song:2020:GLB

- [94] Yating Song and Lihui Guo. General limiting behavior of Riemann solutions to the non-isentropic Euler equations for modified Chaplygin gas. *Journal of Mathematical Physics*, 61(4):041506, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Frappat:2020:DPO

- [95] Luc Frappat, Julien Gaboriaud, Eric Ragoucy, and Luc Vinet. The dual pair $(U_q(\mathfrak{f}\mathfrak{p}(1,1)), \mathfrak{z}_{q^{1/2}}(2n))$, q -oscillators, and Askey–Wilson algebras. *Journal of Mathematical Physics*, 61(4):041701, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

delasCuevas:2020:MSO

- [96] Gemma de las Cuevas and Tim Netzer. Mixed states in one spatial dimension: Decompositions and correspondence with nonnegative matrices. *Journal of Mathematical Physics*, 61(4):041901, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Koussa:2020:PFC

- [97] W. Koussa, M. Attia, and M. Maamache. Pseudo-fermionic coherent states with time-dependent metric. *Journal of Mathematical Physics*, 61(4):042101, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chitambar:2020:EMB

- [98] Eric Chitambar, Julio I. de Vicente, Mark W. Girard, and Gilad Gour. Entanglement manipulation beyond local operations and classical communication. *Journal of Mathematical Physics*, 61(4):042201, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Heinosaari:2020:RPO

- [99] Teiko Heinosaari, Maria Anastasia Jivulescu, and Ion Nechita. Random positive operator valued measures. *Journal of Mathematical Physics*, 61(4):042202, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Pandey:2020:EBR

- [100] Satish K. Pandey, Vern I. Paulsen, Jitendra Prakash, and Mizanur Rahman. Entanglement breaking rank and the existence of SIC POVMs. *Journal of Mathematical Physics*, 61(4):042203, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Boche:2020:USC

- [101] Holger Boche, Gisbert Janßen, and Sajad Saeedinaeini. Universal superposition codes: Capacity regions of compound quantum broadcast channel with confidential messages. *Journal of Mathematical Physics*, 61(4):042204, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ponge:2020:CTT

- [102] Raphaël Ponge. Connes’s trace theorem for curved noncommutative tori: Application to scalar curvature. *Journal of Mathematical Physics*, 61(4):042301, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ha:2020:EBF

- [103] Seung-Yeal Ha, Seungsu Hwang, Dohyun Kim, Sun-Chul Kim, and Chanhho Min. Emergent behaviors of a first-order particle swarm model on the hyperboloid. *Journal of Mathematical Physics*, 61(4):042701, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kondo:2020:ETG

- [104] Shintaro Kondo and Ryusuke Numata. Existence theorem and global asymptotical stability for low-dimensional dynamical models of plasma

turbulence. *Journal of Mathematical Physics*, 61(4):042702, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kerimov:2020:GSC

- [105] Azer Kerimov. Ground state criteria in one-dimensional antiferromagnetic Ising model with long range interaction. *Journal of Mathematical Physics*, 61(4):043301, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Alvarez:2020:SHJ

- [106] Gabriel Álvarez, Luis Martínez Alonso, Elena Medina, and Juan Luis Vázquez. Separatrices in the Hamilton–Jacobi formalism of inflaton models. *Journal of Mathematical Physics*, 61(4):043501, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zabrodin:2020:KHT

- [107] A. Zabrodin. KP hierarchy and trigonometric Calogero–Moser hierarchy. *Journal of Mathematical Physics*, 61(4):043502, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Tian:2020:TSC

- [108] Kai Tian, Q. P. Liu, and Wen Jun Yue. Two super Camassa–Holm equations: Reciprocal transformations and applications. *Journal of Mathematical Physics*, 61(4):043503, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Frank:2020:ETT

- [109] Rupert L. Frank and Simon Larson. On the error in the two-term Weyl formula for the Dirichlet Laplacian. *Journal of Mathematical Physics*, 61(4):043504, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Baker:2020:NRE

- [110] C. Baker and B. Mityagin. Non-real eigenvalues of the harmonic oscillator perturbed by an odd, two-point interaction. *Journal of Mathematical Physics*, 61(4):043505, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fialkovsky:2020:MTS

- [111] Ignat Fialkovsky and Maria Perel. Mode transformation for a Schrödinger type equation: Avoided and unavoidable level crossings.

Journal of Mathematical Physics, 61(4):043506, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Gontier:2020:ESO

- [112] David Gontier. Edge states in ordinary differential equations for dislocations. *Journal of Mathematical Physics*, 61(4):043507, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Campoamor-Stursberg:2020:TFC

- [113] R. Campoamor-Stursberg. Trace formulas for the Casimir operators of the unextended Schrödinger algebra $\mathcal{S}(N)$. *Journal of Mathematical Physics*, 61(4):043508, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Iacono:2020:CCL

- [114] Roberto Iacono. Comment on “Classification of Lie point symmetries for quadratic Liénard type equation $\ddot{x} + f(x)\dot{x}^2 + g(x) = 0$ ” [j. math. phys. **54**, 053506 (2013)]. *Journal of Mathematical Physics*, 61(4):044101, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [5, 115].

Chandrasekar:2020:RCC

- [115] V. K. Chandrasekar, A. K. Tiwari, S. N. Pandey, M. Senthilvelan, and M. Lakshmanan. Response to “Comment on “Classification of Lie point symmetries for quadratic Liénard type equation $\ddot{x} + f(x)\dot{x}^2 + g(x) = 0$ ” [J. Math. Phys. **54**, 053506 (2013)]” [j. math. phys. 61, 044101 (2020)]. *Journal of Mathematical Physics*, 61(4):044102, April 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [5].

Gao:2020:LNS

- [116] Fengshuang Gao and Yuxia Guo. Localized nodal solutions for p -Laplacian equations with critical exponents. *Journal of Mathematical Physics*, 61(5):051501, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kato:2020:SSL

- [117] Keiichi Kato, Masaki Kawamoto, and Koichiro Nanbu. Singularity for solutions of linearized KdV equations. *Journal of Mathematical Physics*, 61(5):051502, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bonaldo:2020:CEE

- [118] L. M. M. Bonaldo, E. J. Hurtado, and O. H. Miyagaki. A class of elliptic equations involving nonlocal integrodifferential operators with sign-changing weight functions. *Journal of Mathematical Physics*, 61(5):051503, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Mansour:2020:SOD

- [119] Toufik Mansour and Matthias Schork. On the second order differential equation involving two ordinary and one para-Grassmann variable. *Journal of Mathematical Physics*, 61(5):051504, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yang:2020:NSF

- [120] Tao Yang. Normalized solutions for the fractional Schrödinger equation with a focusing nonlocal L^2 -critical or L^2 -supercritical perturbation. *Journal of Mathematical Physics*, 61(5):051505, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Garcia-Perciante:2020:ISR

- [121] A. L. García-Perciante and O. Reula. On the illposedness and stability of the relativistic heat equation. *Journal of Mathematical Physics*, 61(5):051506, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Sahoo:2020:VVL

- [122] Manas R. Sahoo and Abhrojyoti Sen. Vanishing viscosity limit for a system of balance laws with general type initial data arising from 1D Saint-Venant model. *Journal of Mathematical Physics*, 61(5):051507, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jang:2020:LAB

- [123] Juhi Jang and Tetu Makino. Linearized analysis of barotropic perturbations around spherically symmetric gaseous stars governed by the Euler–Poisson equations. *Journal of Mathematical Physics*, 61(5):051508, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Karuhanga:2020:NET

- [124] Martin Karuhanga and Eugene Shargorodsky. On negative eigenvalues of two-dimensional Schrödinger operators with singular potentials. *Journal*

of *Mathematical Physics*, 61(5):051509, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Shi:2020:SWQ

- [125] Guodong Shi and Shuanhong Wang. Schur–Weyl quasi-duality and (co)triangular Hopf quasigroups. *Journal of Mathematical Physics*, 61(5):051701, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chang:2020:RLB

- [126] Liang Chang. Representations of the loop braid groups from braided tensor categories. *Journal of Mathematical Physics*, 61(5):051702, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Foissy:2020:MDS

- [127] Loïc Foissy. Multigraded Dyson–Schwinger systems. *Journal of Mathematical Physics*, 61(5):051703, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jing:2020:YDC

- [128] Naihuan Jing, Fan Yang, and Ming Liu. Yangian doubles of classical types and their vertex representations. *Journal of Mathematical Physics*, 61(5):051704, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Meljanac:2020:GHA

- [129] Stjepan Meljanac, Tea Martinić-Bila’c, and Sasa Kresić-Jurić. Generalized Heisenberg algebra applied to realizations of the orthogonal, Lorentz, and Poincaré algebras and their dual extensions. *Journal of Mathematical Physics*, 61(5):051705, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Rego-Monteiro:2020:GNS

- [130] M. A. Rego-Monteiro. Generalized nonlinear Schrödinger equation: Conservation of energy and solitary-wave solutions. *Journal of Mathematical Physics*, 61(5):052101, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ullmann:2020:GWA

- [131] J. Ullmann. Generalization of Weyl’s asymptotic formula for the relative trace of singular potentials. *Journal of Mathematical Physics*, 61(5):

052102, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Morales-Ruiz:2020:DGA

- [132] Juan J. Morales-Ruiz. A differential Galois approach to path integrals. *Journal of Mathematical Physics*, 61(5):052103, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ohlsson:2020:TPT

- [133] Tommy Ohlsson and Shun Zhou. Transition probabilities in the two-level quantum system with PT-symmetric non-Hermitian Hamiltonians. *Journal of Mathematical Physics*, 61(5):052104, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Aizawa:2020:GES

- [134] N. Aizawa, K. Amakawa, and S. Doi. \mathbf{Z}_2^n -graded extensions of supersymmetric quantum mechanics via Clifford algebras. *Journal of Mathematical Physics*, 61(5):052105, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Allen:2020:QPS

- [135] Theodore J. Allen, Donald Spector, and Christopher Wilson. Quantization of pseudoclassical systems in the Schrödinger realization. *Journal of Mathematical Physics*, 61(5):052106, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

D'Alessandro:2020:TOC

- [136] Domenico D'Alessandro, Benjamin A. Sheller, and Zhifei Zhu. Time-optimal control of quantum lambda systems in the KP configuration. *Journal of Mathematical Physics*, 61(5):052107, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Russell:2020:GSS

- [137] Travis B. Russell. Geometry of the set of synchronous quantum correlations. *Journal of Mathematical Physics*, 61(5):052201, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yamagata:2020:QMM

- [138] K. Yamagata. Quantum monotone metrics induced from trace non-increasing maps and additive noise. *Journal of Mathematical Physics*, 61(5):052202, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jia:2020:CYG

- [139] Qiuye Jia and Hai Lin. Calabi–Yau generalized complete intersections and aspects of cohomology of sheaves. *Journal of Mathematical Physics*, 61(5):052301, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Grady:2020:CEV

- [140] J. Connor Grady, Ching Hung Lam, James E. Tener, and Hiroshi Yamauchi. Classification of extremal vertex operator algebras with two simple modules. *Journal of Mathematical Physics*, 61(5):052302, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2020:ABS

- [141] Renhai Wang and Yangrong Li. Asymptotic behavior of stochastic discrete wave equations with nonlinear noise and damping. *Journal of Mathematical Physics*, 61(5):052701, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Andrade:2020:DBP

- [142] Jaime Andrade, Stefanella Boatto, and Claudio Vidal. Dynamics and bifurcation of passive tracers advected by a ring of point vortices on a sphere. *Journal of Mathematical Physics*, 61(5):052702, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Burby:2020:VNW

- [143] J. W. Burby and D. E. Ruiz. Variational nonlinear WKB in the Eulerian frame. *Journal of Mathematical Physics*, 61(5):053101, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Costa:2020:DAF

- [144] L. T. Costa and A. D. Ramos. Dynamic aspects of the flip-annihilation process. *Journal of Mathematical Physics*, 61(5):053301, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Castillo:2020:EIZ

- [145] K. Castillo, M. N. de Jesus, and J. Petronilho. An electrostatic interpretation of the zeros of sieved ultraspherical polynomials. *Journal of Mathematical Physics*, 61(5):053501, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Arnal:2020:ARF

- [146] Didier Arnal, Mouna Chaabouni, and Mabrouka Hfaiedh. Analyticity of a restricted formality. *Journal of Mathematical Physics*, 61(5):053502, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chittaro:2020:CEI

- [147] Francesca Carlotta Chittaro and Paolo Mason. On the conicity of eigenvalues intersections for parameter-dependent self-adjoint operators. *Journal of Mathematical Physics*, 61(5):053503, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Inoue:2020:NSA

- [148] Hiroshi Inoue. Non-self-adjoint Hamiltonians defined by sesquilinear forms and their physical applications. *Journal of Mathematical Physics*, 61(5):053504, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Odake:2020:RRM

- [149] Satoru Odake. Recurrence relations of the multi-indexed orthogonal polynomials. VI. Meixner–Pollaczek and continuous Hahn types. *Journal of Mathematical Physics*, 61(5):053505, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Huguet:2020:MSF

- [150] E. Huguet, J. Queva, and J. Renaud. Massive scalar field on (A)dS space from a massless conformal field in \mathbf{R}^6 . *Journal of Mathematical Physics*, 61(5):053506, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Motegi:2020:CPF

- [151] Kohei Motegi. A class of partition functions associated with $E_{\tau,\eta}gl_3$ by Izergin–Korepin analysis. *Journal of Mathematical Physics*, 61(5):053507, May 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Xu:2020:GST

- [152] Liangshun Xu. Ground states of two-component Bose–Einstein condensates passing an obstacle. *Journal of Mathematical Physics*, 61(6):061501, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Saanouni:2020:PWT

- [153] Tarek Saanouni. Potential well theory for the focusing fractional Choquard equation. *Journal of Mathematical Physics*, 61(6):061502, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bluman:2020:NSB

- [154] George W. Bluman, Rafael de la Rosa, María Santos Bruzón, and María Luz Gandarias. A new symmetry-based method for constructing nonlocally related PDE systems from admitted multi-parameter groups. *Journal of Mathematical Physics*, 61(6):061503, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2020:GSB

- [155] Qi Zhang, Jinqiao Duan, and Yong Chen. Global solution and blow-up of the stochastic nonlinear Schrödinger system. *Journal of Mathematical Physics*, 61(6):061504, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

DosSantos:2020:LTD

- [156] M. J. Dos Santos, M. M. Freitas, A. J. A. Ramos, D. S. Almeida Júnior, and L. R. S. Rodrigues. Long-time dynamics of a nonlinear Timoshenko beam with discrete delay term and nonlinear damping. *Journal of Mathematical Physics*, 61(6):061505, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Marchal:2020:IDR

- [157] Olivier Marchal and Nicolas Orantin. Isomonodromic deformations of a rational differential system and reconstruction with the topological recursion: The $f\downarrow_2$ case. *Journal of Mathematical Physics*, 61(6):061506, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2020:APS

- [158] Yu-Zhu Wang and Yanshuo Li. Asymptotic profiles of solutions to the generalized double dispersion equation with structural damping. *Journal of Mathematical Physics*, 61(6):061507, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Huang:2020:GSS

- [159] Fang Huang and Na Wang. Generalized symplectic Schur functions and SUC hierarchy. *Journal of Mathematical Physics*, 61(6):061508, June

2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Larkin:2020:DRS

- [160] N. A. Larkin. Decay of regular solutions for the critical 2D Zakharov–Kuznetsov equation posed on rectangles. *Journal of Mathematical Physics*, 61(6):061509, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhu:2020:RSS

- [161] Limei Zhu, Bingyuan Huang, and Jinrui Huang. Radially symmetric solutions for Navier–Stokes–Smoluchowski system: Global existence in unbounded annular domain and center singularity. *Journal of Mathematical Physics*, 61(6):061510, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kalantarova:2020:GBS

- [162] H. Kalantarova, V. Kalantarov, and O. Vantzios. Global behavior of solutions to chevron pattern equations. *Journal of Mathematical Physics*, 61(6):061511, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wu:2020:WPN

- [163] Weixin Wu, Long Zhang, and Zhidong Teng. Wave propagation in a non-local dispersal SIR epidemic model with nonlinear incidence and nonlocal distributed delays. *Journal of Mathematical Physics*, 61(6):061512, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Mao:2020:ECG

- [164] Anmin Mao and Qian Zhang. Existence and concentration of ground state solution to a nonlocal Schrödinger equation. *Journal of Mathematical Physics*, 61(6):061513, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yang:2020:WSR

- [165] Li Yang, Chunlai Mu, Shouming Zhou, and Xinyu Tu. On the weak solutions for the rotation-two-component Camassa–Holm equation. *Journal of Mathematical Physics*, 61(6):061514, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chen:2020:ETS

- [166] Shouxin Chen and Manman Yang. Existence of the topological solutions arising in vortices-antivortices equation. *Journal of Mathematical Physics*, 61(6):061515, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Shi:2020:LTB

- [167] Weixuan Shi and Jiang Xu. The large-time behavior of solutions in the critical L^p framework for compressible viscous and heat-conductive gas flows. *Journal of Mathematical Physics*, 61(6):061516, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bilal:2020:STE

- [168] Adel Bilal. Small-time expansion of the Fokker–Planck kernel for space and time dependent diffusion and drift coefficients. *Journal of Mathematical Physics*, 61(6):061517, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jerby:2020:LGS

- [169] Yochay Jerby. On Landau–Ginzburg systems, co-tropical geometry, and $\mathcal{D}^b(X)$ of various toric Fano manifolds. *Journal of Mathematical Physics*, 61(6):061701, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Mayer:2020:FET

- [170] Simon Mayer and Robert Seiringer. The free energy of the two-dimensional dilute Bose gas. II. Upper bound. *Journal of Mathematical Physics*, 61(6):061901, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ludewig:2020:GWB

- [171] Matthias Ludewig and Guo Chuan Thiang. Good Wannier bases in Hilbert modules associated to topological insulators. *Journal of Mathematical Physics*, 61(6):061902, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chen:2020:CMF

- [172] Li Chen, Xin Li, Peter Pickl, and Qitao Yin. Combined mean field limit and non-relativistic limit of Vlasov–Maxwell particle system to Vlasov–Poisson system. *Journal of Mathematical Physics*, 61(6):061903, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Mitnik:2020:WEA

- [173] Darío M. Mitnik and Santiago A. H. Mitnik. Wavefunctions from energies: Applications in simple potentials. *Journal of Mathematical Physics*, 61(6):062101, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bley:2020:MSC

- [174] Gonzalo A. Bley and Søren Fournais. The magnetic Scott correction for relativistic matter at criticality. *Journal of Mathematical Physics*, 61(6):062102, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Alhaidari:2020:BSP

- [175] A. D. Alhaidari and H. Bahlouli. Bound states and the potential parameter spectrum. *Journal of Mathematical Physics*, 61(6):062103, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See comment [651] and response [652].

Quezada:2020:QPT

- [176] L. F. Quezada, A. Martín-Ruiz, and A. Frank. Quantum phase transition of two-level atoms interacting with a finite radiation field. *Journal of Mathematical Physics*, 61(6):062104, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Boche:2020:MTC

- [177] Holger Boche, Minglai Cai, and Ning Cai. Message transmission over classical quantum channels with a jammer with side information: Correlation as resource, common randomness generation. *Journal of Mathematical Physics*, 61(6):062201, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Choi:2020:EES

- [178] Jinwon Choi, Young-Hoon Kiem, and Seung-Hyeok Kye. Entangled edge states of corank one with positive partial transposes. *Journal of Mathematical Physics*, 61(6):062202, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Goswami:2020:NPE

- [179] Abhishek Goswami. A new perturbative expansion for fermionic functional integrals. *Journal of Mathematical Physics*, 61(6):062301, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Rajeev:2020:ERV

- [180] Karthik Rajeev and T. Padmanabhan. Exploring the Rindler vacuum and the Euclidean plane. *Journal of Mathematical Physics*, 61(6):062302, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Sun:2020:RSE

- [181] Yingte Sun. Reducibility of Schrödinger equation at high frequencies. *Journal of Mathematical Physics*, 61(6):062701, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chen:2020:RKT

- [182] Yin Chen, Jiansheng Geng, and Shuaishuai Xue. Reducible KAM tori for higher dimensional wave equations under nonlocal and forced perturbation. *Journal of Mathematical Physics*, 61(6):062702, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Margetis:2020:EPP

- [183] Dionisios Margetis. Edge plasmon-polaritons on isotropic semi-infinite conducting sheets. *Journal of Mathematical Physics*, 61(6):062901, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Nguyen:2020:CLE

- [184] Nhu N. Nguyen and George Yin. A class of Langevin equations with Markov switching involving strong damping and fast switching. *Journal of Mathematical Physics*, 61(6):063301, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Saidi:2020:QLO

- [185] El Hassan Saidi. Quantum line operators from Lax pairs. *Journal of Mathematical Physics*, 61(6):063501, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lotfizadeh:2020:GDO

- [186] M. Lotfizadeh. Gauged Dirac operator on the q -deformed fuzzy Euclidean anti-de Sitter space using the pseudo-generalization of q -deformed Ginsparg–Wilson algebra. *Journal of Mathematical Physics*, 61(6):063502, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bruce:2020:DGS

- [187] Andrew James Bruce and Steven Duplij. Double-graded supersymmetric quantum mechanics. *Journal of Mathematical Physics*, 61(6):063503, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Aziziheris:2020:QGQ

- [188] K. Aziziheris, H. Fakhri, and S. Laheghi. The quantum group $SL_q^*(2)$ and quantum algebra $U_q(sl_2^*)$ based on a new associative multiplication on 2×2 matrices. *Journal of Mathematical Physics*, 61(6):063504, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Scanlon:2020:BIL

- [189] Thomas Scanlon and Roman Sverdlov. Berezin integral as a limit of Riemann sum. *Journal of Mathematical Physics*, 61(6):063505, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See publisher's note [269].

Bagchi:2020:NFN

- [190] Bijan Bagchi and Jianke Yang. New families of non-parity-time-symmetric complex potentials with all-real spectra. *Journal of Mathematical Physics*, 61(6):063506, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Alpay:2020:EPD

- [191] Daniel Alpay and Ismael L. Paiva. On the extension of positive definite kernels to topological algebras. *Journal of Mathematical Physics*, 61(6):063507, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Veliev:2020:SAS

- [192] O. A. Veliev. Spectral analysis of the Schrödinger operator with a PT-symmetric periodic optical potential. *Journal of Mathematical Physics*, 61(6):063508, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ren:2020:QBN

- [193] Suling Ren, Caishi Wang, and Yuling Tang. Quantum Bernoulli noises approach to stochastic Schrödinger equation of exclusion type. *Journal of Mathematical Physics*, 61(6):063509, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Novak:2020:SDT

- [194] Sebastian Novak and Ingo Runkel. Spin from defects in two-dimensional quantum field theory. *Journal of Mathematical Physics*, 61(6):063510, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fernandez:2020:CAI

- [195] Francisco M. Fernández. Comment on “The asymptotic iteration method revisited” [j. math. phys. **61**, 033501 (2020)]. *Journal of Mathematical Physics*, 61(6):064101, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [87] and response [196].

Ismail:2020:RCA

- [196] Mourad E. H. Ismail and Nasser Saad. Response to “Comment on ‘The asymptotic iteration method revisited’” [j. math. phys. **61**, 064101 (2020)]. *Journal of Mathematical Physics*, 61(6):064102, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [87, 195].

Falek:2020:EBO

- [197] M. Falek, M. Merad, and M. Moumni. Erratum: “Bosonic oscillator under a uniform magnetic field with Snyder–de Sitter algebra” [j. math. phys. **60**, 013505 (2019)]. *Journal of Mathematical Physics*, 61(6):069901, June 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [11].

Feola:2020:RSE

- [198] Roberto Feola, Benoît Grébert, and Trung Nguyen. Reducibility of Schrödinger equation on a Zoll manifold with unbounded potential. *Journal of Mathematical Physics*, 61(7):071501, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2020:GWP

- [199] Zaiyun Zhang, Zhenhai Liu, Youjun Deng, Chuangxia Huang, Shiyu Lin, and Wen Zhu. Global well-posedness and infinite propagation speed for the N -abc family of Camassa–Holm type equation with both dissipation and dispersion. *Journal of Mathematical Physics*, 61(7):071502, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yu:2020:GEN

- [200] Jiali Yu, Yadong Shang, and Huafei Di. Global existence, nonexistence, and decay of solutions for a viscoelastic wave equation with nonlinear boundary damping and source terms. *Journal of Mathematical Physics*, 61(7):071503, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Selberg:2020:IPT

- [201] Sigmund Selberg and Achenef Tesfahun. Ill-posedness of the Thirring model below the critical regularity. *Journal of Mathematical Physics*, 61(7):071504, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Oliveira:2020:SIR

- [202] Rafael L. Oliveira and Higidio P. Oquendo. Stability and instability results for coupled waves with delay term. *Journal of Mathematical Physics*, 61(7):071505, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Sun:2020:SPS

- [203] Juntao Sun and Tsung fang Wu. On Schrödinger–Poisson systems under the effect of steep potential well ($2 < p < 4$). *Journal of Mathematical Physics*, 61(7):071506, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Cheng:2020:VOF

- [204] Yi Cheng, Bin Ge, and Ravi P. Agarwal. Variable-order fractional Sobolev spaces and nonlinear elliptic equations with variable exponents. *Journal of Mathematical Physics*, 61(7):071507, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fan:2020:URT

- [205] Jishan Fan, Gen Nakamura, and Tong Tang. Uniform regularity for a two-phase model with magneto field and a related system. *Journal of Mathematical Physics*, 61(7):071508, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Dong:2020:RWB

- [206] Xiaofang Dong. Revisit to wave breaking phenomena for the periodic Dullin–Gottwald–Holm equation. *Journal of Mathematical Physics*, 61(7):071509, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jin:2020:FFT

- [207] Zhentao Jin and Yi Zhou. Formation of finite-time singularities for nonlinear hyperbolic systems with small initial disturbances. *Journal of Mathematical Physics*, 61(7):071510, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Feng:2020:EIN

- [208] Binhua Feng, Jiajia Ren, and Qingxuan Wang. Existence and instability of normalized standing waves for the fractional Schrödinger equations in the L^2 -supercritical case. *Journal of Mathematical Physics*, 61(7):071511, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Nguyen:2020:ECR

- [209] Thanh-Nhan Nguyen and Minh-Phuong Tran. An endpoint case of the renormalization property for the relativistic Vlasov–Maxwell system. *Journal of Mathematical Physics*, 61(7):071512, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Girardot:2020:AFA

- [210] Théotime Girardot. Average field approximation for almost bosonic anyons in a magnetic field. *Journal of Mathematical Physics*, 61(7):071901, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ouellet:2020:SGP

- [211] Mathieu Ouellet and Sébastien Tremblay. Supersymmetric generalized power functions. *Journal of Mathematical Physics*, 61(7):072101, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Merkli:2020:QET

- [212] Marco Merkli, Gennady P. Berman, and Avadh Saxena. Quantum electron transport in degenerate donor-acceptor systems. *Journal of Mathematical Physics*, 61(7):072102, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Akhilesh:2020:GPF

- [213] K. S. Akhilesh, Arvind, S. Chaturvedi, K. S. Mallesh, and N. Mukunda. Geometric phases for finite-dimensional systems — the roles of Bargmann

invariants, null phase curves, and the Schwinger–Majorana $SU(2)$ framework. *Journal of Mathematical Physics*, 61(7):072103, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Groenland:2020:SRA

- [214] Koen Groenland, Carla Groenland, and Reinier Kramer. Stimulated Raman adiabatic passage-like protocols for amplitude transfer generalize to many bipartite graphs. *Journal of Mathematical Physics*, 61(7):072201, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

McKinlay:2020:DRQ

- [215] Alexander McKinlay and Marco Tomamichel. Decomposition rules for quantum Rényi mutual information with an application to information exclusion relations. *Journal of Mathematical Physics*, 61(7):072202, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Battle:2020:AMH

- [216] Guy Battle. Across the mass hyperboloid. *Journal of Mathematical Physics*, 61(7):072301, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Anderson:2020:SG

- [217] Ian Anderson and Charles Torre. Spacetime groups. *Journal of Mathematical Physics*, 61(7):072501, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Herfray:2020:ASI

- [218] Yannick Herfray. Asymptotic shear and the intrinsic conformal geometry of null-infinity. *Journal of Mathematical Physics*, 61(7):072502, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chao:2020:RSM

- [219] Ying Chao, Pingyuan Wei, and Jinqiao Duan. The role of slow manifolds in parameter estimation for a multiscale stochastic system with α -stable Lévy noise. *Journal of Mathematical Physics*, 61(7):072701, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ban:2020:EDS

- [220] Jung-Chao Ban, Chih-Hung Chang, and Nai-Zhu Huang. Entropy dimension of shift spaces on monoids. *Journal of Mathematical Physics*, 61(7):072702, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Tsamparlis:2020:QFI

- [221] Michael Tsamparlis and Antonios Mitsopoulos. Quadratic first integrals of autonomous conservative dynamical systems. *Journal of Mathematical Physics*, 61(7):072703, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Shu:2020:ABN

- [222] Ji Shu, Xin Huang, and Jian Zhang. Asymptotic behavior for non-autonomous fractional stochastic Ginzburg–Landau equations on unbounded domains. *Journal of Mathematical Physics*, 61(7):072704, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chang:2020:PZP

- [223] Shu-Chiuan Chang, Roland K. W. Roeder, and Robert Shrock. q -plane zeros of the Potts partition function on diamond hierarchical graphs. *Journal of Mathematical Physics*, 61(7):073301, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Itoi:2020:ARS

- [224] C. Itoi and Y. Utsunomiya. Absence of replica symmetry breaking in disordered FK ϕ –Ising models under uniform field. *Journal of Mathematical Physics*, 61(7):073302, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Carrozza:2020:LEH

- [225] Sylvain Carrozza, Frank Ferrari, Adrian Tanasa, and Guillaume Valette. On the large D expansion of Hermitian multi-matrix models. *Journal of Mathematical Physics*, 61(7):073501, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhu:2020:SEL

- [226] Mengkun Zhu, Yang Chen, and Chuanzhong Li. The smallest eigenvalue of large Hankel matrices generated by a singularly perturbed Laguerre

weight. *Journal of Mathematical Physics*, 61(7):073502, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Odziejewicz:2020:ICQ

- [227] A. Odziejewicz and E. Wawreniuk. An integrable (classical and quantum) four-wave mixing Hamiltonian system. *Journal of Mathematical Physics*, 61(7):073503, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ucgun:2020:RTM

- [228] Filiz Çagatay Uçgun, Ogul Esen, and Hasan Gümrül. Reductions of topologically massive gravity II. First order realizations of second order Lagrangians. *Journal of Mathematical Physics*, 61(7):073504, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ferapontov:2020:CIL

- [229] E. V. Ferapontov, I. T. Habibullin, M. N. Kuznetsova, and V. S. Novikov. On a class of 2D integrable lattice equations. *Journal of Mathematical Physics*, 61(7):073505, July 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kieu:2020:SMF

- [230] Thinh Kieu. Solution of the mixed formulation for generalized Forchheimer flows of isentropic gases. *Journal of Mathematical Physics*, 61(8):081501, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Shen:2020:SLS

- [231] Chun Shen. The singular limits of solutions to the Riemann problem for the liquid-gas two-phase isentropic flow model. *Journal of Mathematical Physics*, 61(8):081502, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Liao:2020:CNP

- [232] Menglan Liao. A class of nonlinear parabolic equations with anisotropic nonstandard growth conditions. *Journal of Mathematical Physics*, 61(8):081503, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Cheviakov:2020:ICL

- [233] A. F. Cheviakov, V. A. Dorodnitsyn, and E. I. Kaptsov. Invariant conservation law-preserving discretizations of linear and nonlinear wave equations. *Journal of Mathematical Physics*, 61(8):081504, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Christov:2020:LTA

- [234] Ivan C. Christov, Akif Ibraguimov, and Rahnuma Islam. Long-time asymptotics of non-degenerate non-linear diffusion equations. *Journal of Mathematical Physics*, 61(8):081505, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yan:2020:WPH

- [235] Fangchi Yan. Well-posedness of a higher dispersion KdV equation on the half-line. *Journal of Mathematical Physics*, 61(8):081506, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Guo:2020:SBG

- [236] Zihua Guo and Jia Shen. Scattering below the ground state for the 2D non-linear Schrödinger and Klein–Gordon equations revisited. *Journal of Mathematical Physics*, 61(8):081507, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lyu:2020:DCS

- [237] Wenbin Lyu, Liqing Lu, and Shaohua Wu. Decay characterization of the solutions to the Navier–Stokes–Voigt equations with damping. *Journal of Mathematical Physics*, 61(8):081508, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Staffilani:2020:HLM

- [238] Gigliola Staffilani and Xueying Yu. On the high-low method for NLS on the hyperbolic space. *Journal of Mathematical Physics*, 61(8):081509, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bergeron:2020:HRH

- [239] Geoffroy Bergeron, Nicolas Crampé, Satoshi Tsujimoto, Luc Vinet, and Alexei Zhedanov. The Heun–Racah and Heun–Bannai–Ito algebras. *Journal of Mathematical Physics*, 61(8):081701, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Neergaard:2020:FSD

- [240] K. Neergård. Fock space dualities. *Journal of Mathematical Physics*, 61(8):081702, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hartglass:2020:RRC

- [241] Michael Hartglass and Roberto Hernández Palomares. Realizations of rigid c^* -tensor categories as bimodules over GJS c^* -algebras. *Journal of Mathematical Physics*, 61(8):081703, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lucas:2020:NPD

- [242] Andrew Lucas. Non-perturbative dynamics of the operator size distribution in the Sachdev–Ye–Kitaev model. *Journal of Mathematical Physics*, 61(8):081901, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kryukov:2020:MCQ

- [243] Alexey A. Kryukov. Mathematics of the classical and the quantum. *Journal of Mathematical Physics*, 61(8):082101, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Amir:2020:CSP

- [244] Naila Amir and Shahid Iqbal. Coherent states of position-dependent mass trapped in an infinite square well. *Journal of Mathematical Physics*, 61(8):082102, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Schwonnek:2020:WDA

- [245] René Schwonnek and Reinhard F. Werner. The Wigner distribution of n arbitrary observables. *Journal of Mathematical Physics*, 61(8):082103, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Geniet:2020:QHU

- [246] Paul Geniet. On a quantum Hamiltonian in a unitary magnetic field with axisymmetric potential. *Journal of Mathematical Physics*, 61(8):082104, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

daCosta:2020:DQC

- [247] Bruno G. da Costa, Ignacio S. Gomez, and Mariela Portesi. κ -deformed quantum and classical mechanics for a system with position-dependent effective mass. *Journal of Mathematical Physics*, 61(8):082105, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bebiano:2020:QSN

- [248] N. Bebiano, J. da Providência, S. Nishiyama, and J. P. da Providência. A quantum system with a non-Hermitian Hamiltonian. *Journal of Mathematical Physics*, 61(8):082106, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Guerrero:2020:SIW

- [249] Julio Guerrero and Manuel Berrondo. Semiclassical interpretation of Wei–Norman factorization for SU (1, 1) and its related integral transforms. *Journal of Mathematical Physics*, 61(8):082107, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Tahmasbi:2020:SPQ

- [250] Mehrdad Tahmasbi and Matthieu R. Bloch. Steganography protocols for quantum channels. *Journal of Mathematical Physics*, 61(8):082201, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Apadula:2020:SDQ

- [251] Luca Apadula, Alessandro Bisio, Giacomo Mauro D’Ariano, and Paolo Perinotti. Symmetries of the Dirac quantum walk and emergence of the de Sitter group. *Journal of Mathematical Physics*, 61(8):082202, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Takakura:2020:PUI

- [252] Ryo Takakura and Takayuki Miyadera. Preparation uncertainty implies measurement uncertainty in a class of generalized probabilistic theories. *Journal of Mathematical Physics*, 61(8):082203, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Shirokov:2020:SCQ

- [253] M. E. Shirokov. Strong convergence of quantum channels: Continuity of the Stinespring dilation and discontinuity of the unitary dilation. *Journal*

of *Mathematical Physics*, 61(8):082204, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Finster:2020:GFP

- [254] Felix Finster and Sebastian Kindermann. A gauge fixing procedure for causal fermion systems. *Journal of Mathematical Physics*, 61(8):082301, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Gorsky:2020:DTQ

- [255] Alexander Gorsky, Peter Koroteev, Olesya Koroteeva, and Arkady Vainshtein. On dimensional transmutation in 1+1D quantum hydrodynamics. *Journal of Mathematical Physics*, 61(8):082302, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ida:2020:CIC

- [256] Daisuke Ida. Complete integrability of cohomogeneity-one strings in $rn,1$ and canonical form of Killing vector algebra. *Journal of Mathematical Physics*, 61(8):082501, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Morand:2020:EGC

- [257] Kevin Morand. Embedding Galilean and carrollian geometries. i. gravitational waves. *Journal of Mathematical Physics*, 61(8):082502, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jian:2020:RQH

- [258] Wenwen Jian. Reducibility of the quantum harmonic oscillator in d -dimensions with finitely differentiable perturbations. *Journal of Mathematical Physics*, 61(8):082701, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Butler:2020:ITC

- [259] Leo T. Butler. Invariant tori for a class of singly thermostated Hamiltonians. *Journal of Mathematical Physics*, 61(8):082702, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yoshida:2020:DLP

- [260] Zensho Yoshida and Philip J. Morrison. Deformation of Lie–Poisson algebras and chirality. *Journal of Mathematical Physics*, 61(8):082901,

August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Galdi:2020:PSB

- [261] Giovanni P. Galdi. On the problem of steady bifurcation of a falling sphere in a Navier–Stokes liquid. *Journal of Mathematical Physics*, 61(8):083101, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Site:2020:LTE

- [262] Luigi Delle Site and Rupert Klein. Liouville-type equations for the n -particle distribution functions of an open system. *Journal of Mathematical Physics*, 61(8):083102, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Katori:2020:CWP

- [263] Makoto Katori and Shinji Koshida. Conformal welding problem, flow line problem, and multiple Schramm–Loewner evolution. *Journal of Mathematical Physics*, 61(8):083301, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Adhikari:2020:FEQ

- [264] Arka Adhikari and Christian Brennecke. Free energy of the quantum Sherrington–Kirkpatrick spin-glass model with transverse field. *Journal of Mathematical Physics*, 61(8):083302, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kurasov:2020:SPC

- [265] P. Kurasov and P. Sarnak. Stable polynomials and crystalline measures. *Journal of Mathematical Physics*, 61(8):083501, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Schulze-Halberg:2020:GSE

- [266] Axel Schulze-Halberg. Generalized Schrödinger equations with quadratical energy-dependence in the potential: Darboux transformations and application to the Heun class. *Journal of Mathematical Physics*, 61(8):083502, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bakaleinikov:2020:UAE

- [267] Leonid Bakaleinikov and Alexander Silbergleit. Uniform asymptotic expansion of Legendre functions. *Journal of Mathematical Physics*, 61(8):

083503, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Skrypnik:2020:SVQ

- [268] T. Skrypnik. Separation of variables for quadratic algebras: Algebras of Maillet and reflection-equation algebras. *Journal of Mathematical Physics*, 61(8):083504, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Scanlon:2020:PNB

- [269] Thomas Scanlon and Roman Sverdlov. Publisher’s note: “Berezin integral as a limit of Riemann sum” [j. math. phys. **61**, 063505 (2020)]. *Journal of Mathematical Physics*, 61(8):089901, August 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [189].

Silva:2020:PAP

- [270] Edcarlos D. Silva, J. C. de Albuquerque, and Maxwell L. Silva. Periodic and asymptotically periodic quasilinear elliptic systems. *Journal of Mathematical Physics*, 61(9):091501, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2020:GSS

- [271] Guoqing Zhang, Anjie Zuo, and Sanyang Liu. Ground state solitary waves for nonlocal nonlinear Schrödinger systems. *Journal of Mathematical Physics*, 61(9):091502, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Tsutaya:2020:BSS

- [272] Kimitoshi Tsutaya and Yuta Wakasugi. Blow up of solutions of semilinear wave equations in Friedmann–Lemaître–Robertson–Walker spacetime. *Journal of Mathematical Physics*, 61(9):091503, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chen:2020:ENS

- [273] Yong Chen and Lixia Ran. The effect of a noise on the stochastic modified Camassa–Holm equation. *Journal of Mathematical Physics*, 61(9):091504, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Mizutani:2020:STH

- [274] Haruya Mizutani. Scattering theory in homogeneous Sobolev spaces for Schrödinger and wave equations with rough potentials. *Journal of Mathematical Physics*, 61(9):091505, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Liu:2020:DTS

- [275] Zhaoxia Liu and Pigong Han. Decay for turbulent solutions of the magneto-hydrodynamic equations in an exterior domain. *Journal of Mathematical Physics*, 61(9):091506, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ashbaugh:2020:SGD

- [276] Mark S. Ashbaugh and Derek Kielty. Spectral gaps of 1-D Robin Schrödinger operators with single-well potentials. *Journal of Mathematical Physics*, 61(9):091507, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Liu:2020:MRD

- [277] Wulong Liu and Guowei Dai. Multiplicity results for double phase problems in RN. *Journal of Mathematical Physics*, 61(9):091508, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhou:2020:RWS

- [278] Jianfeng Zhou and Zhong Tan. Regularity of weak solutions to a class of nonlinear problem with non-standard growth conditions. *Journal of Mathematical Physics*, 61(9):091509, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Makino:2020:AOS

- [279] Tetu Makino. On adiabatic oscillations of a stratified atmosphere on the flat earth. *Journal of Mathematical Physics*, 61(9):091510, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Samar:2020:RXP

- [280] M. I. Samar and V. M. Tkachuk. Regularization of $1/x^2$ potential in general case of deformed space with minimal length. *Journal of Mathematical Physics*, 61(9):092101, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

deGosson:2020:SCG

- [281] Maurice A. de Gosson. Symplectic coarse-grained classical and semiclassical evolution of subsystems: New theoretical approach. *Journal of Mathematical Physics*, 61(9):092102, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hislop:2020:ESS

- [282] Peter D. Hislop, Werner Kirsch, and M. Krishna. Eigenvalue statistics for Schrödinger operators with random point interactions on \mathbf{R}^d , $d = 1, 2, 3$. *Journal of Mathematical Physics*, 61(9):092103, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Asch:2020:SQC

- [283] Joachim Asch, Olivier Bourget, and Alain Joye. On stable quantum currents. *Journal of Mathematical Physics*, 61(9):092104, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Galtbayar:2020:SMB

- [284] A. Galtbayar, A. Jensen, and K. Yajima. A solvable model of the breakdown of the adiabatic approximation. *Journal of Mathematical Physics*, 61(9):092105, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Taira:2020:LAP

- [285] Kouichi Taira. Limiting absorption principle on L^p -spaces and scattering theory. *Journal of Mathematical Physics*, 61(9):092106, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fauvet:2020:RHM

- [286] Frédéric Fauvet, Frédéric Menous, and Julien Quéva. Resurgence and holonomy of the φ^{2k} model in zero dimension. *Journal of Mathematical Physics*, 61(9):092301, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Dedushenko:2020:CAL

- [287] Mykola Dedushenko and Martin Fluder. Chiral algebra, localization, modularity, surface defects, and all that. *Journal of Mathematical Physics*, 61(9):092302, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kiessling:2020:GRH

- [288] Michael K.-H. Kiessling, A. Shadi Tahvildar-Zadeh, and Ebru Toprak. On general-relativistic hydrogen and hydrogenic ions. *Journal of Mathematical Physics*, 61(9):092303, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Gay-Balmaz:2020:DSN

- [289] François Gay-Balmaz and Hiroaki Yoshimura. Dirac structures in nonequilibrium thermodynamics for simple open systems. *Journal of Mathematical Physics*, 61(9):092701, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kawaharada:2020:NNS

- [290] Akane Kawaharada and Takao Namiki. Number of nonzero states in prefractal sets generated by cellular automata. *Journal of Mathematical Physics*, 61(9):092702, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Li:2020:RPA

- [291] Yongjun Li, Hongqing Wu, and Tinggang Zhao. Random pullback attractor of a non-autonomous local modified stochastic Swift–Hohenberg equation with multiplicative noise. *Journal of Mathematical Physics*, 61(9):092703, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Doliwa:2020:NCB

- [292] Adam Doliwa and Rinat M. Kashaev. Non-commutative birational maps satisfying Zamolodchikov equation, and Desargues lattices. *Journal of Mathematical Physics*, 61(9):092704, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Leyvraz:2020:QPS

- [293] F. Leyvraz. Qualitative properties of systems of two complex homogeneous ODE's: a connection to polygonal billiards. *Journal of Mathematical Physics*, 61(9):092705, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Tibboel:2020:REM

- [294] Pieter Tibboel. Results on equality of masses for choreographic solutions of n -body problems. *Journal of Mathematical Physics*, 61(9):092901, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Diez:2020:SSC

- [295] Tobias Diez and Gerd Rudolph. Singular symplectic cotangent bundle reduction of gauge field theory. *Journal of Mathematical Physics*, 61(9):092902, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Grinevich:2020:CAP

- [296] P. G. Grinevich and R. G. Novikov. Creation and annihilation of point-potentials using Moutard-type transform in spectral variable. *Journal of Mathematical Physics*, 61(9):093501, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Banouh:2020:SCW

- [297] Hicham Banouh and Anouar Ben Mabrouk. A sharp Clifford wavelet Heisenberg-type uncertainty principle. *Journal of Mathematical Physics*, 61(9):093502, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Burby:2020:SMQ

- [298] J. W. Burby, N. Kallinikos, and R. S. MacKay. Some mathematics for quasi-symmetry. *Journal of Mathematical Physics*, 61(9):093503, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Humi:2020:EPI

- [299] Mayer Humi. On the evolution of a primordial interstellar gas cloud. *Journal of Mathematical Physics*, 61(9):093504, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Mukhamedov:2020:QMC

- [300] Farrukh Mukhamedov, Abdessatar Barhoumi, Abdessatar Souissi, and Soueidy El Gheteib. A quantum Markov chain approach to phase transitions for quantum Ising model with competing XY-interactions on a Cayley tree. *Journal of Mathematical Physics*, 61(9):093505, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ontani:2020:SRO

- [301] Riccardo Ontani. Some remarks on the operator formalism for nonlocal Poisson brackets. *Journal of Mathematical Physics*, 61(9):093506, September 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lu:2020:SSC

- [302] Boqiang Lü, Xiang Wang, and Xin Zhong. Strong solutions to the 2D Cauchy problem of nonhomogeneous magnetohydrodynamic equations with vacuum. *Journal of Mathematical Physics*, 61(10):101501, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Li:2020:LUU

- [303] Fuzhi Li and Dongmei Xu. Local uniformly upper semi-continuity of random attractor for g -Navier–Stokes equation. *Journal of Mathematical Physics*, 61(10):101502, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bahrouni:2020:RFP

- [304] Anouar Bahrouni, Vicentiu D. Radulescu, and Patrick Winkert. Robin fractional problems with symmetric variable growth. *Journal of Mathematical Physics*, 61(10):101503, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zeng:2020:EEB

- [305] Lingzhong Zeng. Estimates for the eigenvalues of the bi-drifting Laplacian on complete metric measure spaces. *Journal of Mathematical Physics*, 61(10):101504, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ramos:2020:SRE

- [306] A. J. A. Ramos, M. M. Freitas, D. S. Almeida, Jr., A. S. Noé, and M. J. Dos Santos. Stability results for elastic porous media swelling with nonlinear damping. *Journal of Mathematical Physics*, 61(10):101505, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Qiu:2020:ABS

- [307] Zhaoyang Qiu, Yanbin Tang, and Huaqiao Wang. Asymptotic behavior for the 1D stochastic Landau–Lifshitz–Bloch equation. *Journal of Mathematical Physics*, 61(10):101506, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ammari:2020:CPB

- [308] Kaïs Ammari and Alessandro Duca. Controllability of periodic bilinear quantum systems on infinite graphs. *Journal of Mathematical Physics*, 61

(10):101507, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Assaad:2020:MST

- [309] W. Assaad. Magnetic steps on the threshold of the normal state. *Journal of Mathematical Physics*, 61(10):101508, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kaikina:2020:SNS

- [310] Elena I. Kaikina and Norma Sotelo-Garcia. Stochastic nonlinear Schrödinger equation on an upper-right quarter plane with Dirichlet random boundary. *Journal of Mathematical Physics*, 61(10):101509, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chen:2020:GSS

- [311] Jianqing Chen and Qian Zhang. Ground state solution of Nehari-pohozaev type for periodic quasilinear Schrödinger system. *Journal of Mathematical Physics*, 61(10):101510, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Duca:2020:PQE

- [312] Alessandro Duca, Romain Joly, and Dmitry Turaev. Permuting quantum eigenmodes by a quasi-adiabatic motion of a potential wall. *Journal of Mathematical Physics*, 61(10):101511, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Luo:2020:MSN

- [313] Tao Luo and Yan-Lin Wang. Multi-scale nonlinear singular limit for thermal non-equilibrium gas flow with multiple non-equilibrium modes for analytic data in multi-dimensions with physical boundaries. *Journal of Mathematical Physics*, 61(10):101512, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2020:SCS

- [314] Wenbo Wang, Quanqing Li, and Yongkun Li. The sign-changing solutions and ground states for planar Schrödinger–Newton system with an exponential critical growth. *Journal of Mathematical Physics*, 61(10):101513, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yang:2020:VST

- [315] Jianfu Yang and Jing Yang. Vortex solutions in two-dimensional Bose–Einstein condensates with attraction. *Journal of Mathematical Physics*, 61(10):101514, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Opanasenko:2020:GSC

- [316] Stanislav Opanasenko and Roman O. Popovych. Generalized symmetries and conservation laws of $(1 + 1)$ -dimensional Klein–Gordon equation. *Journal of Mathematical Physics*, 61(10):101515, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Avetisyan:2020:AXK

- [317] M. Y. Avetisyan and R. L. Mkrtchyan. On $(\text{ad})_n(X_2)_k$ series of universal quantum dimensions. *Journal of Mathematical Physics*, 61(10):101701, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Farnsworth:2020:GPO

- [318] S. Farnsworth. The geometry of physical observables. *Journal of Mathematical Physics*, 61(10):101702, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kapustin:2020:HCS

- [319] Anton Kapustin and Nikita Sopenko. Hall conductance and the statistics of flux insertions in gapped interacting lattice systems. *Journal of Mathematical Physics*, 61(10):101901, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lampart:2020:RBF

- [320] Jonas Lampart. The renormalized Bogoliubov–Fröhlich Hamiltonian. *Journal of Mathematical Physics*, 61(10):101902, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Díaz-Bautista:2020:STC

- [321] Erik Díaz-Bautista. Schrödinger-type 2D coherent states of magnetized uniaxially strained graphene. *Journal of Mathematical Physics*, 61(10):102101, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Manko:2020:ITB

- [322] V. I. Man'ko and L. A. Markovich. Integral transforms between tomogram and quasi-probability functions based on quantizer-dequantizer operators formalism. *Journal of Mathematical Physics*, 61(10):102102, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Mana:2020:TDP

- [323] Naima Mana, Omar Zaidi, and Mustapha Maamache. Time-dependent pseudo-bosonic coherent states. *Journal of Mathematical Physics*, 61(10):102103, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Menguturk:2020:SSR

- [324] Levent Ali Mengütürk and Murat Cahit Mengütürk. Stochastic sequential reduction of commutative Hamiltonians. *Journal of Mathematical Physics*, 61(10):102104, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2020:ECD

- [325] Haonan Zhang. Equality conditions of data processing inequality for $\alpha - z$ Rényi relative entropies. *Journal of Mathematical Physics*, 61(10):102201, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kornell:2020:QS

- [326] Andre Kornell. Quantum sets. *Journal of Mathematical Physics*, 61(10):102202, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Mulero-Martinez:2020:QPP

- [327] J. I. Mulero-Martínez and J. Molina-Vilaplana. Quantum Pontryagin principle under continuous measurements. *Journal of Mathematical Physics*, 61(10):102203, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hemame:2020:ESD

- [328] Zoubir Hemame, Mokhtar Falek, and Mustafa Moumni. Exact solutions of D -dimensional Klein–Gordon oscillator with Snyder–de Sitter algebra. *Journal of Mathematical Physics*, 61(10):102301, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Gajic:2020:MPQ

- [329] Dejan Gajic and Claude Warnick. A model problem for quasinormal ring-down of asymptotically flat or extremal black holes. *Journal of Mathematical Physics*, 61(10):102501, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Almeida:2020:FVP

- [330] Ricardo Almeida and Natália Martins. Fractional variational principle of Herglotz for a new class of problems with dependence on the boundaries and a real parameter. *Journal of Mathematical Physics*, 61(10):102701, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ha:2020:CAL

- [331] Seung-Yeal Ha and Hansol Park. Complete aggregation of the Lohe tensor model with the same free flow. *Journal of Mathematical Physics*, 61(10):102702, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2020:COW

- [332] Fei Wang, Jun-Min Wang, and Liang-Liang Li. Chaotic oscillations of wave equations due to nonlinear boundary condition. *Journal of Mathematical Physics*, 61(10):102703, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Calogero:2020:NAS

- [333] F. Calogero, R. Conte, and F. Leyvraz. New algebraically solvable systems of two autonomous first-order ordinary differential equations with purely quadratic right-hand sides. *Journal of Mathematical Physics*, 61(10):102704, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ramakrishna:2020:ACS

- [334] Satish Ramakrishna. Algebra, coherent states, generalized Hermite polynomials, and path integrals for fractional statistics-interpolating from fermions to bosons. *Journal of Mathematical Physics*, 61(10):103301, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Roldan:2020:UPR

- [335] J. Roldan and R. Vila. On the ultrametricity property in random field Ising models. *Journal of Mathematical Physics*, 61(10):103302, Octo-

ber 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Coletti:2020:LTR

- [336] Cristian F. Coletti, Lucas R. de Lima, Renato J. Gava, and Denis A. Luiz. Limit theorems for a random walk with memory perturbed by a dynamical system. *Journal of Mathematical Physics*, 61(10):103303, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Sato:2020:SMN

- [337] Naoki Sato. Statistical mechanics with non-integrable topological constraints: Self-organization in knotted phase space. *Journal of Mathematical Physics*, 61(10):103304, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kalvoda:2020:NFS

- [338] Tomás Kalvoda and Frantisek Stampach. New family of symmetric orthogonal polynomials and a solvable model of a kinetic spin chain. *Journal of Mathematical Physics*, 61(10):103305, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Erignoux:2020:NFO

- [339] Clément Erignoux and Alessandro Giuliani. Nematic first order phase transition for liquid crystals in the van der Waals–Kac limit. *Journal of Mathematical Physics*, 61(10):103306, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ge:2020:SCH

- [340] Yanyan Ge. Super Camassa–Holm-type systems associated to the Kuper–Ramond–Schwarz superalgebra. *Journal of Mathematical Physics*, 61(10):103501, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Do:2020:GPD

- [341] Ngoc Do, Peter Kuchment, and Frank Sottile. Generic properties of dispersion relations for discrete periodic operators. *Journal of Mathematical Physics*, 61(10):103502, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lotfizadeh:2020:SQD

- [342] M. Lotfizadeh. Super quantum Dirac operator on the q-deformed super fuzzy sphere in instanton sector using quantum super Ginsparg–

Wilson algebra. *Journal of Mathematical Physics*, 61(10):103503, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Levin:2020:OSK

- [343] A. Levin, M. Olshanetsky, and A. Zotov. Odd supersymmetric Kronecker elliptic function and Yang–Baxter equations. *Journal of Mathematical Physics*, 61(10):103504, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Castillo:2020:STC

- [344] K. Castillo, F. R. Rafaelli, and A. Suzuki. Stieltjes’ theorem for classical discrete orthogonal polynomials. *Journal of Mathematical Physics*, 61(10):103505, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Alvarez:2020:MLD

- [345] E. Alvarez and N. C. Snaith. Moments of the logarithmic derivative of characteristic polynomials from $SO(N)$ and $USp(2N)$. *Journal of Mathematical Physics*, 61(10):103506, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chebbi:2020:SGD

- [346] Yassin Chebbi. Spectral gap of the discrete Laplacian on triangulations. *Journal of Mathematical Physics*, 61(10):103507, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2020:AST

- [347] Yao-Zhong Zhang. Analytic solutions of the Teukolsky equation for massless perturbations of any spin in de Sitter background. *Journal of Mathematical Physics*, 61(10):103508, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Li:2020:QGM

- [348] Chuanyong Li and Bao Shou. Quantum Gaudin model, spin chains, and universal characters. *Journal of Mathematical Physics*, 61(10):103509, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Majid:2020:DQG

- [349] S. Majid and A. Pachol. Digital quantum groups. *Journal of Mathematical Physics*, 61(10):103510, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Banerjee:2020:BPS

- [350] R. Banerjee and M. Niedermaier. Bonus properties of states of low energy. *Journal of Mathematical Physics*, 61(10):103511, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Taillebois:2020:CQT

- [351] E. R. F. Taillebois and A. T. Avelar. Comment on “Quantum time and spatial localization: An analysis of the Hegerfeldt paradox” [j. math. phys. 41, 6093 (2000)]. *Journal of Mathematical Physics*, 61(10):104101, October 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [2].

Li:2020:ZVC

- [352] Yeping Li and Peicheng Zhu. Zero-viscosity-capillarity limit toward rarefaction wave with vacuum for the Navier–Stokes–Korteweg equations of compressible fluids. *Journal of Mathematical Physics*, 61(11):111501, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Xiong:2020:CST

- [353] Hang Xiong and Xianwen Zhang. On classical solutions of the two-species Vlasov–Poisson system in \mathbb{R}^3 with infinite charge. *Journal of Mathematical Physics*, 61(11):111502, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhong:2020:GEL

- [354] Xin Zhong. Global existence and large time behavior of strong solutions for 3D nonhomogeneous heat conducting Navier–Stokes equations. *Journal of Mathematical Physics*, 61(11):111503, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Cheng:2020:RPS

- [355] Hongjun Cheng and Hanchun Yang. Riemann problem for the 2D scalar conservation law involving linear fluxes with discontinuous coefficients. *Journal of Mathematical Physics*, 61(11):111504, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chatzikaleas:2020:TPS

- [356] Athanasios Chatzikaleas. On time periodic solutions to the conformal cubic wave equation on the Einstein cylinder. *Journal of Mathematical Physics*, 61(11):111505, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jia:2020:GSS

- [357] Huifang Jia. Ground state solutions for the nonlinear Kirchhoff type equations with lower term. *Journal of Mathematical Physics*, 61(11):111506, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Cheng:2020:RMF

- [358] Ming Cheng. Recurrent motion in the fractional complex Ginzburg–Landau equation. *Journal of Mathematical Physics*, 61(11):111507, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Capoferri:2020:SDM

- [359] Matteo Capoferri and Dmitri Vassiliev. Spacetime diffeomorphisms as matter fields. *Journal of Mathematical Physics*, 61(11):111508, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2020:PSR

- [360] Youjun Wang and Yimin Zhang. Positive solutions for a relativistic nonlinear Schrödinger equation with square-root nonlinearity. *Journal of Mathematical Physics*, 61(11):111509, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Suh:2020:SSC

- [361] Uhi Rinn Suh. Structures of (supersymmetric) classical w-algebras. *Journal of Mathematical Physics*, 61(11):111701, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kim:2020:TIL

- [362] Inkang Kim and Genkai Zhang. Toledo invariant of lattices in $SU(2,1)$ via symmetric square. *Journal of Mathematical Physics*, 61(11):111702, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Qi:2020:PCP

- [363] Zihao Qi and Guodong Zhou. Poisson cohomology of plane Poisson structures with isolated singularities revisited. *Journal of Mathematical Physics*, 61(11):111703, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

DelasCuevas:2020:QMS

- [364] Gemma De las Cuevas, Tom Drescher, and Tim Netzer. Quantum magic squares: Dilations and their limitations. *Journal of Mathematical Physics*, 61(11):111704, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Smilga:2020:EDT

- [365] A. V. Smilga. An eight-dimensional Taub–NUT-like hyper-Kähler metric in harmonic superspace formalism. *Journal of Mathematical Physics*, 61(11):112301, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Thuillier:2020:TMH

- [366] F. Thuillier. 3D topological models and Heegaard splitting. II. Pontryagin duality and observables. *Journal of Mathematical Physics*, 61(11):112302, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Finster:2020:LAC

- [367] Felix Finster and Marco Oppio. Local algebras for causal fermion systems in Minkowski space. *Journal of Mathematical Physics*, 61(11):112303, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Borji:2020:PRL

- [368] Majdoulaine Borji and Christoph Kopper. Perturbative renormalization of the lattice regularized φ_4^4 with flow equations. *Journal of Mathematical Physics*, 61(11):112304, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Browning:2020:CLU

- [369] Thomas L. Browning, Benjamin H. Feintzeig, Robin Gates-Redburg, Jonah Librande, and Rory Soiffer. Classical limits of unbounded quantities by strict quantization. *Journal of Mathematical Physics*, 61(11):112305, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ho:2020:GBC

- [370] Pak Tung Ho. The Gauss–Bonnet–Chern mass under geometric flows. *Journal of Mathematical Physics*, 61(11):112501, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ciric:2020:AEC

- [371] Marija Dimitrijević Ćirić, Grigorios Giotopoulos, Voja Radovanović, and Richard J. Szabo. L_∞ -algebras of Einstein–Cartan–Palatini gravity. *Journal of Mathematical Physics*, 61(11):112502, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Liang:2020:MHM

- [372] Zhuobin Liang and Xiao Zhang. Metrics of Horowitz–Myers type with the negative constant scalar curvature. *Journal of Mathematical Physics*, 61(11):112503, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Liu:2020:FDA

- [373] Guo Liu, Tianxiu Lu, Xiaofang Yang, and Anwar Waseem. Further discussion about transitivity and mixing of continuous maps on compact metric spaces. *Journal of Mathematical Physics*, 61(11):112701, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Li:2020:RRA

- [374] Dingshi Li, Lin Shi, and Junyilang Zhao. Regular random attractors for non-autonomous stochastic evolution equations with time-varying delays on thin domains. *Journal of Mathematical Physics*, 61(11):112702, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Tsiganov:2020:RDC

- [375] A. V. Tsiganov. Reduction of divisors for classical superintegrable GL(3) magnetic chain. *Journal of Mathematical Physics*, 61(11):112703, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chen:2020:LSI

- [376] Lu Chen and Jianhua Shen. Lagrange stability for impulsive pendulum-type equations. *Journal of Mathematical Physics*, 61(11):112704, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Saluto:2020:CHF

- [377] Lidia Saluto and David Jou. Coupling of heat flux and vortex polarization in superfluid helium. *Journal of Mathematical Physics*, 61(11):113101,

November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Goto:2020:DEM

- [378] Shin itiro Goto and Hideitsu Hino. Diffusion equations from master equations — a discrete geometric approach. *Journal of Mathematical Physics*, 61(11):113301, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Koukiou:2020:FLT

- [379] Flora Koukiou. Freezing and low temperature entropy: The case of mean-field Gaussian model. *Journal of Mathematical Physics*, 61(11):113302, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Stachura:2020:NEB

- [380] Piotr Stachura, Wiesław Pusz, and Jacek Wojtkiewicz. Non-existence of Bose–Einstein condensation in Bose–Hubbard model in dimensions 1 and 2. *Journal of Mathematical Physics*, 61(11):113303, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Loring:2020:CFH

- [381] Terry A. Loring and Fredy Vides. Computing Floquet Hamiltonians with symmetries. *Journal of Mathematical Physics*, 61(11):113501, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Anerot:2020:NTT

- [382] Baptiste Anerot, Jacky Cresson, Khaled Hariz Belgacem, and Frederic Pierret. Noether’s-type theorems on time scales. *Journal of Mathematical Physics*, 61(11):113502, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See comment [1336].

Mietzsch:2020:VLD

- [383] Nicco Mietzsch. The validity of the local density approximation for smooth short range interaction potentials. *Journal of Mathematical Physics*, 61(11):113503, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Moya-Cessa:2020:CTD

- [384] H. M. Moya-Cessa and J. Récamier. Comment on “Time-dependent coupled harmonic oscillators” [j. math. phys. **53**, 052101 (2012)]. *Journal of*

Mathematical Physics, 61(11):114101, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [4].

DeNittis:2020:EEL

- [385] Giuseppe De Nittis and Max Lein. Erratum: “Exponentially localized Wannier functions in periodic zero flux magnetic fields” [j. math. phys. 52, 112103 (2011)]. *Journal of Mathematical Physics*, 61(11):119901, November 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [3].

Guo:2020:MBS

- [386] Lun Guo and Qi Li. Multiple bound state solutions for fractional Choquard equation with Hardy–Littlewood–Sobolev critical exponent. *Journal of Mathematical Physics*, 61(12):121501, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jiang:2020:ISD

- [387] Suzhen Jiang and Yujiang Wu. An inverse space-dependent source problem for a multi-term time fractional diffusion equation. *Journal of Mathematical Physics*, 61(12):121502, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Dong:2020:BIW

- [388] Xiaofang Dong. Blow-up issues for the weakly dissipative periodic b-family of equations revisited. *Journal of Mathematical Physics*, 61(12):121503, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Mishra:2020:OHL

- [389] Satyendra Kumar Mishra and Anita Naolekar. O -operators on hom-Lie algebras. *Journal of Mathematical Physics*, 61(12):121701, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

vandeVen:2020:CLM

- [390] Christiaan J. F. van de Ven. The classical limit of mean-field quantum spin systems. *Journal of Mathematical Physics*, 61(12):121901, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Santos:2020:HFN

- [391] Jonas F. G. Santos. Heat flow and noncommutative quantum mechanics in phase-space. *Journal of Mathematical Physics*, 61(12):122101, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Alhaidari:2020:SSE

- [392] A. D. Alhaidari. Solving Schrödinger equation by mapping it into a Heun-type equation with known solutions. *Journal of Mathematical Physics*, 61(12):122102, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Maioli:2020:ESL

- [393] Alan C. Maioli and Alexandre G. M. Schmidt. Exact solutions for the Lippmann–Schwinger equation in two dimensions and invisibility conditions. *Journal of Mathematical Physics*, 61(12):122103, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lucas:2020:OGB

- [394] Andrew Lucas and Andrew Osborne. Operator growth bounds in a cartoon matrix model. *Journal of Mathematical Physics*, 61(12):122301, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Avalos:2020:RTS

- [395] R. Avalos and J. H. Lira. Reduced thin-sandwich equations on manifolds Euclidean at infinity and on closed manifolds: Existence and multiplicity. *Journal of Mathematical Physics*, 61(12):122501, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Aadne:2020:NKV

- [396] Matthew Terje Aadne. Nil-Killing vector fields and type III deformations. *Journal of Mathematical Physics*, 61(12):122502, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Gasperin:2020:ZRM

- [397] E. Gasperín and J. A. Valiente Kroon. Zero rest-mass fields and the Newman–Penrose constants on flat space. *Journal of Mathematical Physics*, 61(12):122503, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Flathmann:2020:GEP

- [398] Kai Flathmann and Noa Wassermann. Geodesic equations for particles and light in the black spindle spacetime. *Journal of Mathematical Physics*, 61(12):122504, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Tsamparlis:2020:FIH

- [399] Michael Tsamparlis and Antonios Mitsopoulos. First integrals of holonomic systems without Noether symmetries. *Journal of Mathematical Physics*, 61(12):122701, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ohmori:2020:UBO

- [400] Shousuke Ohmori and Yoshihiro Yamazaki. Ultradiscrete bifurcations for one dimensional dynamical systems. *Journal of Mathematical Physics*, 61(12):122702, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Figotin:2020:SLE

- [401] Alexander Figotin. Synthesis of lossless electric circuits based on prescribed Jordan forms. *Journal of Mathematical Physics*, 61(12):122703, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Johnson:2020:EEU

- [402] K. Johnson and B. Simanek. Electrostatic equilibria on the unit circle via Jacobi polynomials. *Journal of Mathematical Physics*, 61(12):122901, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Aghapour:2020:ZEC

- [403] Sajad Aghapour, Lars Andersson, and Kjell Rosquist. The zilch electromagnetic conservation law revisited. *Journal of Mathematical Physics*, 61(12):122902, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

McLenaghan:2020:CSH

- [404] Raymond G. McLenaghan, Giovanni Rastelli, and Carlos Valero. Complete separability of the Hamilton–Jacobi equation for the charged particle orbits in a Liénard–Wiechert field. *Journal of Mathematical Physics*, 61(12):122903, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Agliari:2020:RHM

- [405] Elena Agliari, Alberto Fachechi, and Chiara Marullo. The relativistic Hopfield model with correlated patterns. *Journal of Mathematical Physics*, 61(12):123301, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Nazarov:2020:FNN

- [406] Fedor Nazarov and Mikhail Sodin. Fluctuations in the number of nodal domains. *Journal of Mathematical Physics*, 61(12):123302, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Krupka:2020:VPP

- [407] Demeter Krupka. Variational principles: Projectability onto Grassmann fibrations. *Journal of Mathematical Physics*, 61(12):123501, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Filipkovska:2020:PEF

- [408] M. S. Filipkovska and V. P. Kotlyarov. Propagation of electric field generated by periodic pumping in a stable medium of two-level atoms of the Maxwell–Bloch model. *Journal of Mathematical Physics*, 61(12):123502, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Burrows:2020:AMF

- [409] Antony Burrows, Shaun Cooper, Elke Pahl, and Peter Schwerdtfeger. Analytical methods for fast converging lattice sums for cubic and hexagonal close-packed structures. *Journal of Mathematical Physics*, 61(12):123503, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Mori:2020:MDA

- [410] Haruka Mori and Shin Sasaki. More on doubled aspects of algebroids in double field theory. *Journal of Mathematical Physics*, 61(12):123504, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Beckus:2020:SCA

- [411] Siegfried Beckus, Jean Bellissard, and Giuseppe De Nittis. Spectral continuity for aperiodic quantum systems: Applications of a folklore theorem.

Journal of Mathematical Physics, 61(12):123505, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Caudrelier:2020:HMD

- [412] Vincent Caudrelier and Matteo Stoppato. Hamiltonian multiform description of an integrable hierarchy. *Journal of Mathematical Physics*, 61(12):123506, December 2020. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ding:2021:ESS

- [413] Yanheng Ding, Qi Guo, and Yuanyang Yu. Existence of semiclassical solutions for some critical Dirac equation. *Journal of Mathematical Physics*, 62(1):011501, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kenig:2021:ASS

- [414] Carlos E. Kenig. Asymptotic simplification for solutions of the energy critical nonlinear wave equation. *Journal of Mathematical Physics*, 62(1):011502, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bal:2021:HHT

- [415] Guillaume Bal, Andrew Lucas, and Mitchell Luskin. Homogenization of hydrodynamic transport in Dirac fluids. *Journal of Mathematical Physics*, 62(1):011503, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Singla:2021:SCE

- [416] Komal Singla and R. K. Gupta. Symmetry classification and exact solutions of $(3 + 1)$ -dimensional fractional nonlinear incompressible non-hydrostatic coupled Boussinesq equations. *Journal of Mathematical Physics*, 62(1):011504, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2021:CSC

- [417] Xiaohui Wang. Compressible subsonic cavity flow in a nozzle. *Journal of Mathematical Physics*, 62(1):011505, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2021:ECB

- [418] Jian Zhang and Zhenluo Lou. Existence and concentration behavior of solutions to Kirchhoff type equation with steep potential well and crit-

ical growth. *Journal of Mathematical Physics*, 62(1):011506, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Nhan:2021:SUS

- [419] Le Cong Nhan and Le Xuan Truong. Stable and unstable sets for damped nonlinear wave equations with variable exponent sources. *Journal of Mathematical Physics*, 62(1):011507, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Cao:2021:GES

- [420] Yuebo Cao, Yi Peng, and Ying Sun. Global existence of strong solutions to MHD with density-depending viscosity and temperature-depending heat-conductivity in unbounded domains. *Journal of Mathematical Physics*, 62(1):011508, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Goudon:2021:NIS

- [421] T. Goudon and L. Vivion. Numerical investigation of solitary wave stability for quantum dissipative systems. *Journal of Mathematical Physics*, 62(1):011509, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Molev:2021:CES

- [422] A. I. Molev. Casimir elements and Sugawara operators for Takiff algebras. *Journal of Mathematical Physics*, 62(1):011701, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bachmann:2021:RIQ

- [423] Sven Bachmann, Alex Bols, Wojciech De Roeck, and Martin Fraas. Rational indices for quantum ground state sectors. *Journal of Mathematical Physics*, 62(1):011901, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Stan:2021:PMD

- [424] A. I. Stan, G. Popa, and R. Dutta. Position-momentum decomposition of linear operators defined on algebras of polynomials. *Journal of Mathematical Physics*, 62(1):012101, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ho:2021:MQM

- [425] Le Bin Ho and Yasushi Kondo. Multiparameter quantum metrology with postselection measurements. *Journal of Mathematical Physics*, 62(1):012102, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Martinez-Perez:2021:DSA

- [426] Armando Martínez-Pérez and Gabino Torres-Vega. Discrete self-adjointness and quantum dynamics. travel times. *Journal of Mathematical Physics*, 62(1):012103, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Szczygielski:2021:MDU

- [427] Krzysztof Szczygielski. Markovian dynamics under weak periodic coupling. *Journal of Mathematical Physics*, 62(1):012104, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lotoreichik:2021:FKI

- [428] Vladimir Lotoreichik and Alessandro Michelangeli. Faber–Krahn inequalities for Schrödinger operators with point and with Coulomb interactions. *Journal of Mathematical Physics*, 62(1):012105, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Haah:2021:CTI

- [429] Jeongwan Haah. Classification of translation invariant topological Pauli stabilizer codes for prime dimensional qudits on two-dimensional lattices. *Journal of Mathematical Physics*, 62(1):012201, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Besnard:2021:ESM

- [430] Fabien Besnard. A $U(1)_{B-L}$ -extension of the standard model from non-commutative geometry. *Journal of Mathematical Physics*, 62(1):012301, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Calogero:2021:SST

- [431] F. Calogero and F. Payandeh. Solvable systems of two coupled first-order ODEs with homogeneous cubic polynomial right-hand sides. *Journal of Mathematical Physics*, 62(1):012701, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Nucci:2021:MSS

- [432] M. C. Nucci and R. Campoamor-Stursberg. Maximally superintegrable systems in flat three-dimensional space are linearizable. *Journal of Mathematical Physics*, 62(1):012702, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Pina:2021:FBC

- [433] E. Piña. Five-body central configurations and symmetry. *Journal of Mathematical Physics*, 62(1):012901, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Huang:2021:APS

- [434] Hai Huang and Xianlong Fu. Asymptotic properties of solutions for impulsive neutral stochastic functional integro-differential equations. *Journal of Mathematical Physics*, 62(1):013301, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yamaga:2021:WRN

- [435] Kazuki Yamaga. Work relation in non-equilibrium steady states of one-dimensional quantum lattice systems. *Journal of Mathematical Physics*, 62(1):013302, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Stepanenko:2021:SIP

- [436] Alexei Stepanenko. Spectral inclusion and pollution for a class of dissipative perturbations. *Journal of Mathematical Physics*, 62(1):013501, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Carvalho:2021:GZH

- [437] Silas L. Carvalho and César R. de Oliveira. Generic zero-Hausdorff and one-packing spectral measures. *Journal of Mathematical Physics*, 62(1):013502, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Aremua:2021:DOF

- [438] Isiaka Aremua, Mahouton Norbert Hounkonnou, and Ezinvi Baloitcha. Density operator formulation for magnetic systems: Physical and mathematical aspects. *Journal of Mathematical Physics*, 62(1):013503, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Sheftel:2021:NSC

- [439] M. B. Sheftel. Nonlocal symmetry of CMA generates ASD Ricci-flat metric with no Killing vectors. *Journal of Mathematical Physics*, 62(1):013504, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bergeron:2021:SLA

- [440] Geoffroy Bergeron, Julien Gaboriaud, Luc Vinet, and Alexei Zhedanov. Sklyanin-like algebras for $(q-)$ linear grids and $(q-)$ para-Krawtchouk polynomials. *Journal of Mathematical Physics*, 62(1):013505, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Skripka:2021:LEF

- [441] A. Skripka. Lipschitz estimates for functions of Dirac and Schrödinger operators. *Journal of Mathematical Physics*, 62(1):013506, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lotfizadeh:2021:DOQ

- [442] M. Lotfizadeh. Dirac operator on the quantum fuzzy four-sphere SqF4. *Journal of Mathematical Physics*, 62(1):013507, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Harnad:2021:BEL

- [443] J. Harnad and A. Yu. Orlov. Bilinear expansions of lattices of KP τ -functions in BKP τ -functions: a fermionic approach. *Journal of Mathematical Physics*, 62(1):013508, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ho:2021:DOR

- [444] Choon-Lin Ho and Ryu Sasaki. Discrete orthogonality relations for multi-indexed Laguerre and Jacobi polynomials. *Journal of Mathematical Physics*, 62(1):013509, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Nobe:2021:PLI

- [445] Atsushi Nobe and Junta Matsukidaira. Periodicity, linearizability, and integrability in seed mutations of type AN(1). *Journal of Mathematical Physics*, 62(1):013510, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

De:2021:SET

- [446] Debabrata De and Kunal Mukherjee. On symmetric embedding of type I factors. *Journal of Mathematical Physics*, 62(1):013511, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fernandez:2021:CQA

- [447] Francisco M. Fernández. Comment on: “Quantum aspects of a moving magnetic quadrupole moment interacting with an electric field” [j. math. phys. **56**, 062107 (2015)]. *Journal of Mathematical Physics*, 62(1):014101, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [7].

Fujiie:2021:PNS

- [448] Setsuro Fujiie and Spyridon Kamvissis. Publisher’s note: “Semiclassical WKB problem for the non-self-adjoint Dirac operator with analytic potential” [j. math. phys. **61**, 011510 (2020)]. *Journal of Mathematical Physics*, 62(1):019901, January 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [25].

Zirnbauer:2021:PHS

- [449] Martin R. Zirnbauer. Particle-hole symmetries in condensed matter. *Journal of Mathematical Physics*, 62(2):021101, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wu:2021:SVS

- [450] Jinbiao Wu. Stochastic viscosity solutions for stochastic integral-partial differential equations. *Journal of Mathematical Physics*, 62(2):021501, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jin:2021:GES

- [451] Chunyin Jin. Global existence of strong solutions to the kinetic Cucker–Smale model coupled with the Stokes equations. *Journal of Mathematical Physics*, 62(2):021502, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhai:2021:GSD

- [452] Xiaoping Zhai. Global solutions to the n -dimensional incompressible Oldroyd-B model without damping mechanism. *Journal of Mathematical Physics*, 62(2):021503, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Rickard:2021:VBP

- [453] Calum Rickard. The vacuum boundary problem for the spherically symmetric compressible Euler equations with positive density and unbounded entropy. *Journal of Mathematical Physics*, 62(2):021504, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Li:2021:DNS

- [454] Yongsheng Li and Fangyan Yao. Derivation of the nonlinear Schrödinger equation with a general nonlinearity and Gross–Pitaevskii hierarchy in one and two dimensions. *Journal of Mathematical Physics*, 62(2):021505, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2021:SASa

- [455] W.-M. Wang. Semi-algebraic sets method in PDE and mathematical physics. *Journal of Mathematical Physics*, 62(2):021506, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ramos:2021:SSP

- [456] A. J. A. Ramos, D. S. Almeida Júnior, M. M. Freitas, A. S. Noé, and M. J. Dos Santos. Stabilization of swelling porous elastic soils with fluid saturation and delay time terms. *Journal of Mathematical Physics*, 62(2):021507, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Valero-Valdes:2021:SGO

- [457] Carlos Valero-Valdés. Singular geometrical optics for differential operators on surfaces. *Journal of Mathematical Physics*, 62(2):021508, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Liu:2021:EFD

- [458] Shujuan Liu and Guanghua Shi. The existence of full-dimensional invariant tori for an almost-periodically forced nonlinear beam equation. *Journal of Mathematical Physics*, 62(2):021509, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ding:2021:SBL

- [459] Shijin Ding, Zhilin Lin, and Dongjuan Niu. Stability of the boundary layer expansion for the 3D plane parallel MHD flow. *Journal of Mathe-*

mathematical Physics, 62(2):021510, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wu:2021:GSS

- [460] Yunshun Wu, Li Xiao, and Rongfeng Yu. Global strong solutions for viscous radiative gas with degenerate temperature dependent heat conductivity in one-dimensional unbounded domains. *Journal of Mathematical Physics*, 62(2):021511, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Balogh:2021:IGP

- [461] F. Balogh, J. Harnad, and J. Hurtubise. Isotropic Grassmannians, Plücker and Cartan maps. *Journal of Mathematical Physics*, 62(2):021701, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kac:2021:PTF

- [462] Victor G. Kac, Natasha Rozhkovskaya, and Johan van de Leur. Polynomial tau-functions of the KP, BKP, and the s -component KP hierarchies. *Journal of Mathematical Physics*, 62(2):021702, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Krasnov:2021:CSM

- [463] Kirill Krasnov. $SO(9)$ characterization of the standard model gauge group. *Journal of Mathematical Physics*, 62(2):021703, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Xiong:2021:RVL

- [464] Haoren Xiong. Resonances as viscosity limits for exponentially decaying potentials. *Journal of Mathematical Physics*, 62(2):022101, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

John:2021:CPF

- [465] Tiju Cherian John and K. R. Parthasarathy. A common parametrization for finite mode Gaussian states, their symmetries, and associated contractions with some applications. *Journal of Mathematical Physics*, 62(2):022102, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Mann:2021:EAA

- [466] Ryan L. Mann and Tyler Helmuth. Efficient algorithms for approximating quantum partition functions. *Journal of Mathematical Physics*, 62(2):022201, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bhojraj:2021:QAR

- [467] Tejas Bhojraj. Quantum algorithmic randomness. *Journal of Mathematical Physics*, 62(2):022202, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Huber:2021:PMT

- [468] Felix Huber. Positive maps and trace polynomials from the symmetric group. *Journal of Mathematical Physics*, 62(2):022203, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Stedman:2021:EST

- [469] Richard Stedman and Ian A. B. Strachan. Extended \vee -systems and trigonometric solutions to the WDVV equations. *Journal of Mathematical Physics*, 62(2):022301, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Cammarota:2021:NDR

- [470] Valentina Cammarota, Domenico Marinucci, and Igor Wigman. Nodal deficiency of random spherical harmonics in presence of boundary. *Journal of Mathematical Physics*, 62(2):022701, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhu:2021:PAL

- [471] Kaixuan Zhu, Yongqin Xie, Feng Zhou, and Qiyuan Zhou. Pullback attractors for p -Laplacian equations with delays. *Journal of Mathematical Physics*, 62(2):022702, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jian:2021:ALL

- [472] Wenwen Jian, Jia Shi, and Xiaoping Yuan. Anderson localization for long-range operators with singular potentials. *Journal of Mathematical Physics*, 62(2):022703, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chen:2021:ABN

- [473] Zhang Chen and Lingyu Li. Asymptotic behavior of non-autonomous stochastic complex Ginzburg–Landau equations on unbounded thin domains. *Journal of Mathematical Physics*, 62(2):022704, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chen:2021:EAS

- [474] Pengyu Chen and Xuping Zhang. Existence of attractors for stochastic diffusion equations with fractional damping and time-varying delay. *Journal of Mathematical Physics*, 62(2):022705, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Amarel:2021:RRE

- [475] J. Amarel, D. Belitz, and T. R. Kirkpatrick. Rigorous results for the electrical conductivity due to electron-phonon scattering. *Journal of Mathematical Physics*, 62(2):023301, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jansen:2021:RGA

- [476] Sabine Jansen. Revisiting Groeneveld’s approach to the virial expansion. *Journal of Mathematical Physics*, 62(2):023302, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bohacik:2021:TDP

- [477] J. Bohácik, P. Presnajder, and P. Augustín. Time-dependent propagator for an-harmonic oscillator with quartic term in potential. *Journal of Mathematical Physics*, 62(2):023501, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lugiewicz:2021:PSW

- [478] Piotr Lugiewicz, Lech Jakóbczyk, and Andrzej Frydryszak. Properties of states on Weyl algebra with variable multiplication law. *Journal of Mathematical Physics*, 62(2):023502, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Johnson:2021:ERR

- [479] Bruce R. Johnson. Erratum: “The radial reduced Coulomb Green’s function” [j. math. phys. **20**, 2484 (1979)]. *Journal of Mathematical Physics*, 62(2):029901, February 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [1].

Xu:2021:LWP

- [480] Qingmei Xu and Xin Zhong. Local well-posedness to the three-dimensional barotropic compressible magnetohydrodynamic equations with vacuum. *Journal of Mathematical Physics*, 62(3):031501, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lee:2021:SHB

- [481] Ho Lee. The spatially homogeneous Boltzmann equation for massless particles in an FLRW background. *Journal of Mathematical Physics*, 62(3):031502, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fan:2021:LTT

- [482] Huiying Fan and Meng Wang. The Liouville type theorem for the stationary magnetohydrodynamic equations. *Journal of Mathematical Physics*, 62(3):031503, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yang:2021:NGS

- [483] Zuo Yang. Normalized ground state solutions for Kirchhoff type systems. *Journal of Mathematical Physics*, 62(3):031504, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Sun:2021:IKT

- [484] Juntao Sun, Kuan-Hsiang Wang, and Tsung fang Wu. On indefinite Kirchhoff-type equations under the combined effect of linear and super-linear terms. *Journal of Mathematical Physics*, 62(3):031505, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kang:2021:ECN

- [485] Lingping Kang, Xuemei Deng, and Qunyi Bie. Energy conservation for the nonhomogeneous incompressible ideal Hall–MHD equations. *Journal of Mathematical Physics*, 62(3):031506, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Pinheiro:2021:NSV

- [486] Cristyan Pinheiro and Gabriela Planas. On the α -Navier–Stokes–Vlasov and the α -Navier–Stokes–Vlasov–Fokker–Planck equations. *Journal of Mathematical Physics*, 62(3):031507, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kim:2021:IMS

- [487] Jae-Myoung Kim and Jung-Hyun Bae. Infinitely many solutions of fractional Schrödinger–Maxwell equations. *Journal of Mathematical Physics*, 62(3):031508, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Khoutir:2021:LES

- [488] Sofiane Khoutir. Least energy sign-changing solutions for a class of Schrödinger–Poisson system on bounded domains. *Journal of Mathematical Physics*, 62(3):031509, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chern:2021:CSS

- [489] Jann-Long Chern, Zhi-You Chen, and Hung-Ying Shen. Classification of solutions for self-dual Chern–Simons CP (1) model. *Journal of Mathematical Physics*, 62(3):031510, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Dinh:2021:PCT

- [490] Van Duong Dinh. Probabilistic Cauchy theory for the mass-critical fourth-order nonlinear Schrödinger equation. *Journal of Mathematical Physics*, 62(3):031511, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Al-Mahdi:2021:GEA

- [491] Adel M. Al-Mahdi, Mohammad M. Al-Gharabli, Mohammad Kafini, and Shadi Al-Omari. On the global existence and asymptotic behavior of the solution of a nonlinear wave equation with past history. *Journal of Mathematical Physics*, 62(3):031512, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Li:2021:EUG

- [492] Yan Li and Yong Luo. Existence and uniqueness of ground states for attractive Bose–Einstein condensates in box-shaped traps. *Journal of Mathematical Physics*, 62(3):031513, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jeltema:2021:LDP

- [493] Tesla Jeltema, Stefano Profumo, and Jaryd F. Ulbricht. Lowest-dimensional portals to SU(N) exotics. *Journal of Mathematical Physics*, 62(3):031701, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fakhri:2021:LCF

- [494] H. Fakhri and S. Laheghi. Left-covariant first order differential calculus on quantum Hopf supersymmetry algebra. *Journal of Mathematical Physics*, 62(3):031702, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bakalov:2021:RTT

- [495] Bojko Bakalov and Samantha Kirk. Representations of twisted toroidal Lie algebras from twisted modules over vertex algebras. *Journal of Mathematical Physics*, 62(3):031703, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ghanta:2021:GSP

- [496] Rohan Ghanta. Ground state of the polaron hydrogenic atom in a strong magnetic field. *Journal of Mathematical Physics*, 62(3):031901, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Correggi:2021:MPA

- [497] Michele Correggi and Davide Fermi. Magnetic perturbations of anyonic and Aharonov–Bohm Schrödinger operators. *Journal of Mathematical Physics*, 62(3):032101, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Facchi:2021:SPS

- [498] Paolo Facchi, Marilena Ligabò, and Davide Lonigro. Spectral properties of the singular Friedrichs–Lee Hamiltonian. *Journal of Mathematical Physics*, 62(3):032102, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Beschastnyi:2021:OST

- [499] Ivan Beschastnyi, Ugo Boscain, and Mario Sigalotti. An obstruction to small-time controllability of the bilinear Schrödinger equation. *Journal of Mathematical Physics*, 62(3):032103, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Dong:2021:IWF

- [500] Jianping Dong and Ying Lu. Infinite wall in the fractional quantum mechanics. *Journal of Mathematical Physics*, 62(3):032104, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hoffmann:2021:UCS

- [501] Scott E. Hoffmann. Unitary, continuum, stationary perturbation theory for the radial Schrödinger equation. *Journal of Mathematical Physics*, 62(3):032105, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Amore:2021:UTT

- [502] Paolo Amore and Francisco M. Fernández. An ubiquitous three-term recurrence relation. *Journal of Mathematical Physics*, 62(3):032106, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Goldberg:2021:SLC

- [503] Adina Goldberg. Synchronous linear constraint system games. *Journal of Mathematical Physics*, 62(3):032201, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Aguilar:2021:NEW

- [504] Pedro Aguilar, Chryssomalis Chryssomalakos, and Edgar Guzmán-González. Noise effects on the Wilczek–Zee geometric phase. *Journal of Mathematical Physics*, 62(3):032202, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2021:LUC

- [505] C. H. Wang, J. T. Yuan, Y. H. Yang, and G. F. Mu. Local unitary classification of generalized Bell state sets in $C^5 \otimes C^5$. *Journal of Mathematical Physics*, 62(3):032203, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Reuvers:2021:GPC

- [506] Robin Reuvers. Generalized Pauli constraints in large systems: The Pauli principle dominates. *Journal of Mathematical Physics*, 62(3):032204, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See publisher’s note [607].

Dereli:2021:MCG

- [507] Tekin Dereli and Keremcan Dogan. Metric-connection geometries on pre-Leibniz algebroids: a search for geometrical structure in string models. *Journal of Mathematical Physics*, 62(3):032301, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kreutzer:2021:CAE

- [508] Lars T. Kreutzer. Canonical analysis of $E_6(6)(R)$ invariant five dimensional (super-)gravity. *Journal of Mathematical Physics*, 62(3):032302, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Letsios:2021:ESQ

- [509] Vasileios A. Letsios. The eigenmodes for spinor quantum field theory in global de Sitter space-time. *Journal of Mathematical Physics*, 62(3):032303, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Gudnason:2021:BVS

- [510] Sven Bjarke Gudnason, Minoru Eto, and Muneto Nitta. 1/2-BPS vortex strings in $\mathcal{N} = 2$ supersymmetric $U(1)^N$ gauge theories. *Journal of Mathematical Physics*, 62(3):032304, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Khan:2021:CSR

- [511] Abu Mohammad Khan. Continuous spin representation from contraction of the conformal algebra. *Journal of Mathematical Physics*, 62(3):032305, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ikeda:2021:GAD

- [512] Noriaki Ikeda and Shin Sasaki. Global aspects of doubled geometry and pre-rackoid. *Journal of Mathematical Physics*, 62(3):032306, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Futaki:2021:HMS

- [513] Masahiro Futaki and Hiroshige Kajiura. Homological mirror symmetry of CP^n and their products via Morse homotopy. *Journal of Mathematical Physics*, 62(3):032307, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

De:2021:PFS

- [514] U. C. De, S. K. Chaubey, and S. Shenawy. Perfect fluid spacetimes and Yamabe solitons. *Journal of Mathematical Physics*, 62(3):032501, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Collingbourne:2021:GLI

- [515] Sam C. Collingbourne. The Gregory-laflamme instability of the Schwarzschild black string exterior. *Journal of Mathematical Physics*, 62(3):032502, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Allen:2021:DLP

- [516] Samantha Allen and Jacob H. Swenberg. Do link polynomials detect causality in globally hyperbolic spacetimes? *Journal of Mathematical Physics*, 62(3):032503, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Aouadi:2021:DNR

- [517] Moncef Aouadi, Imed Mahfoudhi, and Taoufik Moulahi. Decay and numerical results in nonsimple viscoelasticity. *Journal of Mathematical Physics*, 62(3):032701, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2021:EAS

- [518] Pin Wang and Guanggan Chen. Effective approximation of stochastic sine-Gordon equation with a fast oscillation. *Journal of Mathematical Physics*, 62(3):032702, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yaremko:2021:EFS

- [519] Yuriy Yaremko. Electrodynamics in flat spacetime of six dimensions. *Journal of Mathematical Physics*, 62(3):032901, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chaturvedi:2021:PCC

- [520] Rahul Kumar Chaturvedi and L. P. Singh. The phenomena of concentration and cavitation in the Riemann solution for the isentropic zero-pressure dusty gasdynamics. *Journal of Mathematical Physics*, 62(3):033101, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Li:2021:HMT

- [521] Wuchen Li. Hessian metric via transport information geometry. *Journal of Mathematical Physics*, 62(3):033301, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Valls:2021:RLC

- [522] Clàudia Valls. Rational limit cycles on generalized bernouilli polynomial equations. *Journal of Mathematical Physics*, 62(3):033501, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Muranova:2021:EIO

- [523] Anna Muranova. Effective impedance over ordered fields. *Journal of Mathematical Physics*, 62(3):033502, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Langley:2021:GLH

- [524] R. S. Langley. A generalization of the Lagrange–Hamilton formalism with application to non-conservative systems and the quantum to classical transition. *Journal of Mathematical Physics*, 62(3):033503, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Domanski:2021:DQC

- [525] Ziemowit Domański. Deformation quantization on the cotangent bundle of a Lie group. *Journal of Mathematical Physics*, 62(3):033504, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chung:2021:MDQ

- [526] Won Sang Chung and Abdullah Algin. Multi-dimensional q -deformed bosonic Newton oscillators and the related q -calculus, q -coherent states, and Hermite q -polynomials. *Journal of Mathematical Physics*, 62(3):033505, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Esen:2021:HJF

- [527] Ogul Esen, Manuel de León, Cristina Sardón, and Marcin Zajsc. Hamilton–Jacobi formalism on locally conformally symplectic manifolds. *Journal of Mathematical Physics*, 62(3):033506, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Avetisyan:2021:GHF

- [528] Z. Avetisyan. Global hyperbolicity and factorization in cosmological models. *Journal of Mathematical Physics*, 62(3):033507, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhu:2021:PIF

- [529] Mengkun Zhu, Dan Wang, and Yang Chen. Painlevé IV, σ -form, and the deformed Hermite unitary ensembles. *Journal of Mathematical Physics*, 62(3):033508, March 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jiang:2021:LBR

- [530] Weifeng Jiang, Tong Li, Zhen Wang, and Shutian Fang. The limiting behavior of the Riemann solutions of non-isentropic modified Chaplygin gas dynamics. *Journal of Mathematical Physics*, 62(4):041501, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wei:2021:CPG

- [531] Long Wei and Yang Wang. The Cauchy problem for a generalized Riemann-type hydrodynamical equation. *Journal of Mathematical Physics*, 62(4):041502, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zheng:2021:DAR

- [532] Pan Zheng and Robert Willie. Dynamics in an attraction-repulsion Navier–Stokes system with signal-dependent motility and sensitivity. *Journal of Mathematical Physics*, 62(4):041503, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ren:2021:GST

- [533] Guoqiang Ren. Global solvability in a two-species chemotaxis system with logistic source. *Journal of Mathematical Physics*, 62(4):041504, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Xu:2021:WPB

- [534] Fei Xu, Yong Zhang, and Fengquan Li. The well-posedness, blow-up, and traveling waves for a two-component Fornberg–Whitham system. *Journal of Mathematical Physics*, 62(4):041505, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Juarez-Campos:2021:SSE

- [535] Beatriz Juarez-Campos. Stochastic Schrödinger equation with Dirichlet noise boundary conditions. *Journal of Mathematical Physics*, 62(4):041506, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2021:MSD

- [536] Xiangqin Zhang. Monotonicity of solution to the dark monopole equations in non-Abelian gauge field theory. *Journal of Mathematical Physics*, 62(4):041507, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lin:2021:SDE

- [537] Ke Lin and Tian Xiang. Strong damping effect of chemo-repulsion prevents blow-up. *Journal of Mathematical Physics*, 62(4):041508, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wei:2021:IMM

- [538] Juncheng Wei and Yuanze Wu. Infinitely many multi-vortex solutions of the magnetic Ginzburg–Landau equation with external potentials in \mathbb{R}^2 . *Journal of Mathematical Physics*, 62(4):041509, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chen:2021:PSK

- [539] Peng Chen and Xiaochun Liu. Positive solutions for Kirchhoff equation in exterior domains. *Journal of Mathematical Physics*, 62(4):041510, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Xie:2021:AED

- [540] Binqiang Xie and Lan Zeng. Almost exponential decay of the Boussinesq equations without surface tension on the upper free boundary. *Journal of Mathematical Physics*, 62(4):041511, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Babenko:2021:TFF

- [541] Constantin Babenko, Frank Göhmann, Karol K. Kozłowski, and Junji Suzuki. A thermal form factor series for the longitudinal two-point function of the Heisenberg–Ising chain in the antiferromagnetic massive regime. *Journal of Mathematical Physics*, 62(4):041901, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Filoché:2021:EPM

- [542] Marcel Filoche, Svitlana Mayboroda, and Terence Tao. The effective potential of an M -matrix. *Journal of Mathematical Physics*, 62(4):041902, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bahns:2021:TBT

- [543] Dorothea Bahns and Detlev Buchholz. Trapped bosons, thermodynamic limit, and condensation: a study in the framework of resolvent algebras. *Journal of Mathematical Physics*, 62(4):041903, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Christiansen:2021:RPJ

- [544] Jacob S. Christiansen, Barry Simon, and Maxim Zinchenko. Remarks on periodic Jacobi matrices on trees. *Journal of Mathematical Physics*, 62(4):042101, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lian:2021:HUP

- [545] Pan Lian. Heisenberg's uncertainty principle associated with the Caputo fractional derivative. *Journal of Mathematical Physics*, 62(4):042102, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Loran:2021:DFL

- [546] Farhang Loran and Ali Mostafazadeh. Dynamical formulation of low-energy scattering in one dimension. *Journal of Mathematical Physics*, 62(4):042103, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ohlsson:2021:TPF

- [547] Tommy Ohlsson and Shun Zhou. Transition probabilities for flavor eigenstates of non-Hermitian Hamiltonians in the PT-broken phase. *Journal of Mathematical Physics*, 62(4):042104, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Cruz-Prado:2021:NDQ

- [548] H. Cruz-Prado, G. Marmo, D. Schuch, and O. Castaños. Nonlinear description of quantum dynamics: Generalized coherent states. *Journal of Mathematical Physics*, 62(4):042105, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chong:2021:DLB

- [549] Jacky Chong. Dynamics of large boson systems with attractive interaction and a derivation of the cubic focusing NLS equation in R3. *Journal of Mathematical Physics*, 62(4):042106, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Tehrani:2021:CIM

- [550] Alireza Tehrani and Rajesh Pereira. The coherent information on the manifold of positive definite density matrices. *Journal of Mathematical Physics*, 62(4):042201, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jing:2021:CMI

- [551] Yangping Jing, Chi-Kwong Li, Edward Poon, and Chengyang Zhang. Coherence measures induced by norm functions. *Journal of Mathematical Physics*, 62(4):042202, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Caro:2021:NCM

- [552] Matthias C. Caro and Benedikt R. Graswald. Necessary criteria for Markovian divisibility of linear maps. *Journal of Mathematical Physics*, 62(4):042203, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Mograby:2021:HST

- [553] Gamal Mograby, Maxim Derevyagin, Gerald V. Dunne, and Alexander Teplyaev. Hamiltonian systems, Toda lattices, solitons, Lax pairs on weighted Z -graded graphs. *Journal of Mathematical Physics*, 62(4):042204, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Loulidi:2021:CDQ

- [554] Faedi Loulidi and Ion Nechita. The compatibility dimension of quantum measurements. *Journal of Mathematical Physics*, 62(4):042205, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fiorenza:2021:TCI

- [555] Domenico Fiorenza, Hisham Sati, and Urs Schreiber. Twisted cohomology implies twisted string structure on M5-branes. *Journal of Mathematical Physics*, 62(4):042301, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Takaesu:2021:FOE

- [556] Toshimitsu Takaesu. The first order expansion of a ground state energy of the φ^4 model with cutoffs. *Journal of Mathematical Physics*, 62(4):042302, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bettadapura:2021:BCT

- [557] Kowshik Bettadapura and Hai Lin. Boundary contributions to three loop superstring amplitudes. *Journal of Mathematical Physics*, 62(4):042303, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hamilton:2021:LSW

- [558] Mark J. D. Hamilton. A lift of the Seiberg–Witten equations to Kaluza–Klein five-manifolds. *Journal of Mathematical Physics*, 62(4):042304, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Giannakis:2021:QDC

- [559] Dimitrios Giannakis. Quantum dynamics of the classical harmonic oscillator. *Journal of Mathematical Physics*, 62(4):042701, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Koch:2021:GMR

- [560] Hans Koch. Golden mean renormalization for the almost Mathieu operator and related skew products. *Journal of Mathematical Physics*, 62(4):042702, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Figotin:2021:PCE

- [561] Alexander Figotin. Perturbations of circuit evolution matrices with Jordan blocks. *Journal of Mathematical Physics*, 62(4):042703, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

deLeon:2021:SCM

- [562] Manuel de León, Manuel Lainz, and Asier López-Gordón. Symmetries, constants of the motion, and reduction of mechanical systems with external forces. *Journal of Mathematical Physics*, 62(4):042901, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Baez:2021:OSC

- [563] John C. Baez, David Weisbart, and Adam M. Yassine. Open systems in classical mechanics. *Journal of Mathematical Physics*, 62(4):042902, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wu:2021:SLN

- [564] Yunshun Wu and Yong Wang. Stability on large non-constant steady states of semiconductor equations. *Journal of Mathematical Physics*, 62(4):043101, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Cosco:2021:TIM

- [565] Clément Cosco and Assaf Shapira. Topologically induced metastability in a periodic XY chain. *Journal of Mathematical Physics*, 62(4):043301, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2021:SNR

- [566] Wei Zhang. Some new results on relative entropy production, time reversal, and optimal control of time-inhomogeneous diffusion processes. *Journal of Mathematical Physics*, 62(4):043302, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Erbin:2021:CEV

- [567] Harold Erbin, Vincent Lahocche, and Mohamed Tamaazousti. Constructive expansion for vector field theories I. Quartic models in low dimensions. *Journal of Mathematical Physics*, 62(4):043501, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Amakawa:2021:CLW

- [568] K. Amakawa and N. Aizawa. A classification of lowest weight irreducible modules over \mathbf{Z}_2^2 -graded extension of $\mathfrak{osp}(1|2)$. *Journal of Mathematical Physics*, 62(4):043502, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Boumaza:2021:IDS

- [569] H. Boumaza and O. Lafitte. Integrated density of states: From the finite range to the periodic Airy–Schrödinger operator. *Journal of Mathematical Physics*, 62(4):043503, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Accornero:2021:STE

- [570] Luca Accornero and Marcella Palese. Symmetry transformations of extremals and higher conserved quantities: Invariant Yang–Mills connections. *Journal of Mathematical Physics*, 62(4):043504, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Villanueva:2021:FPI

- [571] Lloyd L. Villanueva and Eric A. Galapon. Finite-part integration in the presence of competing singularities: Transformation equations for the hypergeometric functions arising from finite-part integration. *Journal of Mathematical Physics*, 62(4):043505, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Maurya:2021:FLE

- [572] Shambhu Nath Maurya and Koushik Saha. Fluctuations of linear eigenvalue statistics of reverse circulant and symmetric circulant matrices with independent entries. *Journal of Mathematical Physics*, 62(4):043506, April 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Shuai:2021:EMS

- [573] Wei Shuai. Existence and multiplicity of solutions for logarithmic Schrödinger equations with potential. *Journal of Mathematical Physics*, 62(5):051501, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Huh:2021:BCS

- [574] Hyungjin Huh and Jihyun Yim. L^∞ bounds for Chern–Simons gauged equations in R^{1+1} and their applications. *Journal of Mathematical Physics*, 62(5):051502, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fan:2021:BCF

- [575] Jie Fan, Quansen Jiu, Yanqing Wang, and Yuelong Xiao. Blow up criterion for the 2D full compressible Navier–Stokes equations involving temperature in critical spaces. *Journal of Mathematical Physics*, 62(5):051503, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jiang:2021:GEL

- [576] Zaihong Jiang, Qingning Zhang, and Mingxuan Zhu. Global existence and long time behavior of the generalized Camassa–Holm equation with $k + 1$ degree nonlinearities. *Journal of Mathematical Physics*, 62(5):051504, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fan:2021:LWP

- [577] Jishan Fan and Yong Zhou. Local well-posedness for the isentropic compressible MHD system with vacuum. *Journal of Mathematical Physics*, 62(5):051505, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2021:GSN

- [578] Yang Wang, Xinyue Cao, Zhaohai Ma, and Xiong Li. Global stability of noncritical traveling front solutions of Fisher-type equations with degenerate nonlinearity. *Journal of Mathematical Physics*, 62(5):051506, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Boer:2021:EMS

- [579] Eduardo de S. Böer and Olímpio H. Miyagaki. Existence and multiplicity of solutions for the fractional p -Laplacian Choquard logarithmic equation involving a nonlinearity with exponential critical and subcritical growth. *Journal of Mathematical Physics*, 62(5):051507, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See publisher's note [653].

Paranamana:2021:GMF

- [580] Pushpi Paranamana, Eugenio Aulisa, and Magdalena Toda. Geometric model of the fracture as a manifold immersed in porous media. *Journal of Mathematical Physics*, 62(5):051508, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Sarrico:2021:MPA

- [581] C. O. R. Sarrico. The movement of a particle according to the Gurevich–Zybin dark matter model. *Journal of Mathematical Physics*, 62(5):051509, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yang:2021:DIM

- [582] Shuang Yang and Yangrong Li. Dynamics and invariant measures of multi-stochastic sine-Gordon lattices with random viscosity and nonlinear noise. *Journal of Mathematical Physics*, 62(5):051510, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hezari:2021:DIP

- [583] Hamid Hezari, Z. Lu, and J. Rowlett. The Dirichlet isospectral problem for trapezoids. *Journal of Mathematical Physics*, 62(5):051511, May

2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Dimakis:2021:GPS

- [584] Aristophanes Dimakis and Igor G. Korepanov. Grassmannian-parameterized solutions to direct-sum polygon and simplex equations. *Journal of Mathematical Physics*, 62(5):051701, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kojima:2021:QRD

- [585] Takeo Kojima. Quadratic relations of the deformed W -superalgebra $\mathcal{W}_{q,t}(f\uparrow(2|1))$. *Journal of Mathematical Physics*, 62(5):051702, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Dali:2021:KLB

- [586] Béchir Dali and Rafik Khalfi. On Kirillov's lemma and the Benson-ratcliff invariant. *Journal of Mathematical Physics*, 62(5):051703, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hainzl:2021:APB

- [587] Christian Hainzl. Another proof of BEC in the GP-limit. *Journal of Mathematical Physics*, 62(5):051901, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lopez:2021:SLD

- [588] P. C. López, R. Santos-Silva, and A. García. Solutions to linear dissipative quantum systems. *Journal of Mathematical Physics*, 62(5):052101, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Sadurni:2021:HDA

- [589] Emerson Sadurní, Francois Leyvraz, Thomas Stegmann, Thomas H. Seligman, and Douglas J. Klein. Hidden duality and accidental degeneracy in cycloacene and Möbius cycloacene. *Journal of Mathematical Physics*, 62(5):052102, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Znojil:2021:EPD

- [590] Miloslav Znojil. Exceptional points and domains of unitarity for a class of strongly non-Hermitian real-matrix Hamiltonians. *Journal of Math-*

ematical Physics, 62(5):052103, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lin:2021:CSS

- [591] Hai Lin and Yuwei Zhu. Coherent state superpositions, entanglement, and gauge/gravity correspondence. *Journal of Mathematical Physics*, 62(5):052301, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Grewcoe:2021:DFT

- [592] Clay James Grewcoe and Larisa Jonke. Double field theory algebroid and curved L_∞ -algebras. *Journal of Mathematical Physics*, 62(5):052302, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Acik:2021:GSS

- [593] Özgür Açıık and Ümit Ertem. Generalized symmetry superalgebras. *Journal of Mathematical Physics*, 62(5):052303, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2021:YMM

- [594] Xiangqin Zhang and Yisong Yang. Yang–Mills monopoles in extremal Reissner–Nordström black hole metric. *Journal of Mathematical Physics*, 62(5):052304, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

McNutt:2021:TGC

- [595] D. D. McNutt, A. A. Coley, and R. J. van den Hoogen. Teleparallel geometries not characterized by their scalar polynomial torsion invariants. *Journal of Mathematical Physics*, 62(5):052501, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ha:2021:EDL

- [596] Seung-Yeal Ha, Myeongju Kang, and Hansol Park. Emergent dynamics of the Lohe Hermitian sphere model with frustration. *Journal of Mathematical Physics*, 62(5):052701, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Budhiraja:2021:LDE

- [597] Amarjit Budhiraja, Yong Chen, and Lihu Xu. Large deviations of the entropy production rate for a class of Gaussian processes. *Journal of Mathematical Physics*, 62(5):052702, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Llibre:2021:ZHB

- [598] Jaume Llibre and Yuzhou Tian. The zero-Hopf bifurcations of a four-dimensional hyperchaotic system. *Journal of Mathematical Physics*, 62(5):052703, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Massa:2021:SCL

- [599] Enrico Massa and Enrico Pagani. Symmetry and conservation laws in non-holonomic mechanics. *Journal of Mathematical Physics*, 62(5):052901, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Freistühler:2021:DSM

- [600] Heinrich Freistühler, Moritz Reintjes, and Blake Temple. Decay and subluminality of modes of all wave numbers in the relativistic dynamics of viscous and heat conductive fluids. *Journal of Mathematical Physics*, 62(5):053101, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Cavallaro:2021:TEV

- [601] Guido Cavallaro and Carlo Marchioro. Time evolution of vortex rings with large radius and very concentrated vorticity. *Journal of Mathematical Physics*, 62(5):053102, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Giorgadze:2021:TEI

- [602] G. Giorgadze and G. Khimshiashvili. Triangles and electrostatic ion traps. *Journal of Mathematical Physics*, 62(5):053501, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Molinari:2021:SNB

- [603] Luca Guido Molinari. Some Neumann–Bessel series and the Laplacian on polygons. *Journal of Mathematical Physics*, 62(5):053502, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Boldyreva:2021:ESK

- [604] Maria N. Boldyreva and Alexey A. Magazev. Exact solutions of Klein–Gordon equations in external electromagnetic fields on 3D de Sitter background. *Journal of Mathematical Physics*, 62(5):053503, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Karpeshina:2021:BTS

- [605] Yulia Karpeshina, Leonid Parnovski, and Roman Shterenberg. Ballistic transport for Schrödinger operators with quasi-periodic potentials. *Journal of Mathematical Physics*, 62(5):053504, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fox:2021:RMH

- [606] Matthew S. Fox. Retraction: “Multipole hair of Schwarzschild–Tangherlini black holes” [J. Math. Phys. **60**, 102502 (2019)]. *Journal of Mathematical Physics*, 62(5):059901, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [14].

Reuvers:2021:PNG

- [607] Robin Reuvers. Publisher’s note: “Generalized Pauli constraints in large systems: The Pauli principle dominates” [J. Math. Phys. **62**, 032204 (2021)]. *Journal of Mathematical Physics*, 62(5):059902, May 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [506].

Huang:2021:CVH

- [608] Yongting Huang and Tao Luo. Compressible viscous heat-conducting surface wave without surface tension. *Journal of Mathematical Physics*, 62(6):061501, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Prokofev:2021:ESM

- [609] V. Prokofev and A. Zabrodin. Elliptic solutions to matrix KP hierarchy and spin generalization of elliptic Calogero–Moser model. *Journal of Mathematical Physics*, 62(6):061502, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Guo:2021:EMR

- [610] Ya-Hong Guo, Hong-Rui Sun, and Na Cui. Existence and multiplicity results for the fractional magnetic Schrödinger equations with critical growth. *Journal of Mathematical Physics*, 62(6):061503, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Itakura:2021:SST

- [611] Kyohei Itakura. Stationary scattering theory for repulsive Hamiltonians. *Journal of Mathematical Physics*, 62(6):061504, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Li:2021:EDB

- [612] Donghao Li, Hongwei Zhang, and Qingying Hu. Energy decay and blow-up of solutions for a viscoelastic equation with nonlocal nonlinear boundary dissipation. *Journal of Mathematical Physics*, 62(6):061505, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Nzissila:2021:BSM

- [613] Florent Nzissila, Octave Moutsinga, and Fulgence Eyi Obiang. Backward semi-martingales into Burgers turbulence. *Journal of Mathematical Physics*, 62(6):061506, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhao:2021:STD

- [614] Xiaopeng Zhao. Space-time decay of solutions to three-dimensional MHD equations with Hall and ion-slip effects. *Journal of Mathematical Physics*, 62(6):061507, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Liu:2021:GEE

- [615] Lingxi Liu and Xin Zhong. Global existence and exponential decay of strong solutions for 2D nonhomogeneous micropolar fluids with density-dependent viscosity. *Journal of Mathematical Physics*, 62(6):061508, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Schlag:2021:PDW

- [616] W. Schlag. On pointwise decay of waves. *Journal of Mathematical Physics*, 62(6):061509, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Logunov:2021:EAI

- [617] A. Logunov and H. Papazov. An elliptic adaptation of ideas of Carleman and Domar from complex analysis related to Levinson's loglog theorem. *Journal of Mathematical Physics*, 62(6):061510, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2021:AYS

- [618] Na Wang and Linjie Shi. Affine Yangian and Schur functions on plane partitions of 4. *Journal of Mathematical Physics*, 62(6):061701, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bardet:2021:MLS

- [619] Ivan Bardet, Ángela Capel, Angelo Lucia, David Pérez-García, and Cambyse Rouzé. On the modified logarithmic Sobolev inequality for the heat-bath dynamics for 1D systems. *Journal of Mathematical Physics*, 62(6):061901, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kukulski:2021:GRQ

- [620] Ryszard Kukulski, Ion Nechita, Łukasz Paweł, Zbigniew Puchała, and Karol Życzkowski. Generating random quantum channels. *Journal of Mathematical Physics*, 62(6):062201, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Suzuki:2021:QAC

- [621] Masuo Suzuki. Quantum analysis on the convergence speed of exponential product formulas — differential-subtraction and exchange-integration method on concise norm bounds. *Journal of Mathematical Physics*, 62(6):062202, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yamagata:2021:MLD

- [622] K. Yamagata. Maximum logarithmic derivative bound on quantum state estimation as a dual of the Holevo bound. *Journal of Mathematical Physics*, 62(6):062203, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Pereg:2021:QBC

- [623] Uzi Pereg, Christian Deppe, and Holger Boche. Quantum broadcast channels with cooperating decoders: an information-theoretic perspective on quantum repeaters. *Journal of Mathematical Physics*, 62(6):062204, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Debbasch:2021:QWS

- [624] F. Debbasch. Quantum walks simulating non-commutative geometry in the Landau problem. *Journal of Mathematical Physics*, 62(6):062205, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Tlas:2021:CEI

- [625] T. Tlas. A construction of Euclidean invariant, reflection positive measures on a compactification of distributions. *Journal of Mathematical*

Physics, 62(6):062301, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Frob:2021:SDQ

- [626] M. B. Fröb and A. Much. Strict deformations of quantum field theory in de Sitter spacetime. *Journal of Mathematical Physics*, 62(6):062302, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kaninsky:2021:DLC

- [627] J. Káninský. Discrete linear canonical evolution. *Journal of Mathematical Physics*, 62(6):062303, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ripley:2021:SHF

- [628] Justin L. Ripley. A symmetric hyperbolic formulation of the vacuum Einstein equations in affine-null coordinates. *Journal of Mathematical Physics*, 62(6):062501, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Herrera:2021:RPT

- [629] J. Herrera, M. de la Rosa, and R. M. Rubio. Relativistic particles with torsion in three-dimensional non-vacuum spacetimes. *Journal of Mathematical Physics*, 62(6):062502, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

He:2021:BLP

- [630] Xiaokai He, Xiaoning Wu, and Naqing Xie. From bending of light to positive mass: a non-PDE perspective. *Journal of Mathematical Physics*, 62(6):062503, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2021:NWE

- [631] Jinhua Wang. Nonlinear wave equation in a cosmological Kaluza Klein spacetime. *Journal of Mathematical Physics*, 62(6):062504, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yang:2021:WZA

- [632] Yuan Yang, Ji Shu, and Xiaohu Wang. Wong–Zakai approximations and random attractors of non-autonomous stochastic discrete complex Ginzburg–Landau equations. *Journal of Mathematical Physics*, 62(6):

062701, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Nwaigwe:2021:CWA

- [633] Dwight Nwaigwe. On the convergence of WKB approximations of the damped Mathieu equation. *Journal of Mathematical Physics*, 62(6):062702, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chiba:2021:NFC

- [634] Hayato Chiba. Normal forms of C^∞ vector fields based on the renormalization group. *Journal of Mathematical Physics*, 62(6):062703, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fabregas:2021:RRD

- [635] A. Ruiz de Zarate Fabregas, N. L. Dias, and D. G. Alfaro Vigo. Realizability of the rapid distortion theory spectrum: the mechanism behind the Kelvin–Townsend equations. *Journal of Mathematical Physics*, 62(6):063101, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2021:ATD

- [636] Kui Zhang and Gustavo Didier. Asymptotic theory for the detection of mixing in anomalous diffusion. *Journal of Mathematical Physics*, 62(6):063301, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lyu:2021:ALE

- [637] Shulin Lyu, Chao Min, and Yang Chen. Asymptotics of the largest eigenvalue distribution of the Laguerre unitary ensemble. *Journal of Mathematical Physics*, 62(6):063302, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Caceres:2021:ERP

- [638] Manuel O. Cáceres. Exact results on Poisson noise, Poisson flights, and Poisson fluctuations. *Journal of Mathematical Physics*, 62(6):063303, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Tan:2021:CAE

- [639] Chengliang Tan and Jilong Zhang. Calculation of algebraic entropies of $d\text{-}P_{IV}$ and $d\text{-}P_V$. *Journal of Mathematical Physics*, 62(6):063501,

June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Berkolaiko:2021:CMT

- [640] Gregory Berkolaiko and Laura Booton. Convergence of moments of twisted COE matrices. *Journal of Mathematical Physics*, 62(6):063502, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Saidani:2021:CVC

- [641] Samira Saidani and Sid-Ahmed Yahiaoui. Complementarity vs coordinate transformations: Mapping between pseudo-Hermiticity and weak pseudo-Hermiticity. *Journal of Mathematical Physics*, 62(6):063503, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Friedmann:2021:ERF

- [642] Tamar Friedmann and Quincy Webb. Euler's reflection formula, infinite product formulas, and the correspondence principle of quantum mechanics. *Journal of Mathematical Physics*, 62(6):063504, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bourgine:2021:QWS

- [643] Jean-Emile Bourgin. Quantum $W_{1+\infty}$ subalgebras of BCD type and symmetric polynomials. *Journal of Mathematical Physics*, 62(6):063505, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Eder:2021:SFB

- [644] Konstantin Eder. Super fiber bundles, connection forms, and parallel transport. *Journal of Mathematical Physics*, 62(6):063506, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kozlowski:2021:SDR

- [645] Karol K. Kozlowski. On singularities of dynamic response functions in the massless regime of the XXZ spin-1/2 chain. *Journal of Mathematical Physics*, 62(6):063507, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Skrypnyk:2021:CVC

- [646] T. Skrypnyk. On a class of $\mathfrak{gl}(n) \otimes \mathfrak{gl}(n)$ -valued classical r -matrices and separation of variables. *Journal of Mathematical Physics*, 62(6):063508,

June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kachkovskiy:2021:PDM

- [647] Ilya Kachkovskiy, Stanislav Krymski, Leonid Parnovski, and Roman Shterenberg. Perturbative diagonalization for Maryland-type quasiperiodic operators with flat pieces. *Journal of Mathematical Physics*, 62(6):063509, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Mouayn:2021:CSS

- [648] Zouhaïr Mouayn and Hashim A. Yamani. Coherent states of systems with pure continuous energy spectra. *Journal of Mathematical Physics*, 62(6):063510, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Mejjaoli:2021:UPA

- [649] Hatem Mejjaoli and Firdous A. Shah. Uncertainty principles associated with the directional short-time Fourier transform. *Journal of Mathematical Physics*, 62(6):063511, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kuznetsova:2021:CMZ

- [650] Zhanna Kuznetsova and Francesco Toppan. Classification of minimal $\mathbf{Z}_2 \times \mathbf{Z}_2$ -graded Lie (super)algebras and some applications. *Journal of Mathematical Physics*, 62(6):063512, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fernandez:2021:CBS

- [651] Francisco M. Fernández. Comment on “Bound states and the potential parameter spectrum” [J. Math. Phys. **61**, 062103 (2020)]. *Journal of Mathematical Physics*, 62(6):064101, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [175] and response [652].

Alhaidari:2021:RCB

- [652] A. D. Alhaidari and H. Bahlouli. Response to “Comment on ‘Bound states and the potential parameter spectrum’” [J. Math. Phys. **62**, 064101 (2021)]. *Journal of Mathematical Physics*, 62(6):064102, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [175, 651].

Boer:2021:PNE

- [653] Eduardo de S. Böer and Olímpio H. Miyagaki. Publisher’s note: “Existence and multiplicity of solutions for the fractional p -Laplacian Choquard logarithmic equation involving a nonlinearity with exponential critical and subcritical growth” [J. Math. Phys. **62**, 051507 (2021)]. *Journal of Mathematical Physics*, 62(6):069901, June 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [579].

Liu:2021:CPF

- [654] Xuan Liu and Ting Zhang. The Cauchy problem for the fourth-order Schrödinger equation in H^s . *Journal of Mathematical Physics*, 62(7):071501, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hayashi:2021:MSH

- [655] Nakao Hayashi and Pavel I. Naumkin. Modified scattering for the higher-order anisotropic nonlinear Schrödinger equation in two space dimensions. *Journal of Mathematical Physics*, 62(7):071502, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Pan:2021:LTS

- [656] Xinghong Pan. Liouville theorem of D -solutions to the stationary magnetohydrodynamics system in a slab. *Journal of Mathematical Physics*, 62(7):071503, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jing:2021:NGS

- [657] Yongtao Jing and Haidong Liu. Nonexistence of ground state solutions for generalized quasilinear Schrödinger equations via dual approach. *Journal of Mathematical Physics*, 62(7):071504, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Saoudi:2021:SEP

- [658] Kamel Saoudi, Akasmika Panda, and Debajyoti Choudhuri. A singular elliptic problem involving fractional p -Laplacian and a discontinuous critical nonlinearity. *Journal of Mathematical Physics*, 62(7):071505, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Choi:2021:DMN

- [659] Mi-Ran Choi, Younghoon Kang, and Young-Ran Lee. On dispersion managed nonlinear Schrödinger equations with lumped amplification. *Journal of Mathematical Physics*, 62(7):071506, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Dodson:2021:GWP

- [660] Benjamin Dodson, Avraham Soffer, and Thomas Spencer. Global well-posedness for the cubic nonlinear Schrödinger equation with initial data lying in L^p -based Sobolev spaces. *Journal of Mathematical Physics*, 62(7):071507, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Choreño:2021:AAB

- [661] E. Choreño, R. Valencia, and D. Ojeda-Guillén. Algebraic approach and Berry phase of a Hamiltonian with a general $SU(1, 1)$ symmetry. *Journal of Mathematical Physics*, 62(7):071701, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Tao:2021:RCE

- [662] W.-Q. Tao. On representations of the centrally extended Heisenberg double of SL_2 . *Journal of Mathematical Physics*, 62(7):071702, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Haldane:2021:GIP

- [663] F. D. M. Haldane. Gauge-invariant perturbation expansion in powers of electric charge for the density-of-states of a network model for charged-particle motion in a uniform background magnetic flux density. *Journal of Mathematical Physics*, 62(7):071901, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Oldenburg:2021:GSB

- [664] Jakob Oldenburg. On ground states of the Bogoliubov energy functional: a direct proof. *Journal of Mathematical Physics*, 62(7):071902, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bagchi:2021:DHS

- [665] Bijan Bagchi and Rahul Ghosh. Dirac Hamiltonian in a supersymmetric framework. *Journal of Mathematical Physics*, 62(7):072101, July 2021.

2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Rushka:2021:CTO

- [666] Michael Rushka, M. A. Esrick, W. N. Mathews, Jr., and J. K. Freericks. Converting translation operators into plane polar and spherical coordinates and their use in determining quantum-mechanical wavefunctions in a representation-independent fashion. *Journal of Mathematical Physics*, 62(7):072102, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Escobar-Ruiz:2021:FBH

- [667] Adrian M. Escobar-Ruiz, Alexander V. Turbiner, and Willard Miller, Jr. Four-body (an)harmonic oscillator in d -dimensional space: S -states, (quasi)-exact-solvability, hidden algebra $sl(7)$. *Journal of Mathematical Physics*, 62(7):072103, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Gazeau:2021:GSG

- [668] J.-P. Gazeau, V. Hussin, J. Moran, and K. Zelaya. Generalized Susskind–Glogower coherent states. *Journal of Mathematical Physics*, 62(7):072104, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Shahbeigi:2021:LCS

- [669] Fereshthe Shahbeigi, David Amaro-Alcalá, Zbigniew Puchała, and Karol Życzkowski. Log-convex set of Lindblad semigroups acting on N -level system. *Journal of Mathematical Physics*, 62(7):072105, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Duerinckx:2021:NSA

- [670] Mitia Duerinckx and Christopher Shirley. A new spectral analysis of stationary random Schrödinger operators. *Journal of Mathematical Physics*, 62(7):072106, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Sanchez-Mendoza:2021:SBI

- [671] Daniel Sánchez-Mendoza. Sharp bounds for the integrated density of states of a strongly disordered 1D Anderson–Bernoulli model. *Journal of Mathematical Physics*, 62(7):072107, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Weinzierl:2021:CIN

- [672] Stefan Weinzierl. On the computation of intersection numbers for twisted cocycles. *Journal of Mathematical Physics*, 62(7):072301, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bernardo:2021:SBH

- [673] Reginald Christian Bernardo and Ian Vega. Stealth black hole perturbations in kinetic gravity braiding. *Journal of Mathematical Physics*, 62(7):072501, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Trevino:2021:TT

- [674] Rodrigo Treviño. Tilings and traces. *Journal of Mathematical Physics*, 62(7):072701, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Cresson:2021:SMN

- [675] Jacky Cresson, Laurent Nottale, and Thierry Lehner. Stochastic modification of Newtonian dynamics and induced potential-application to spiral galaxies and the dark potential. *Journal of Mathematical Physics*, 62(7):072702, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ban:2021:VMP

- [676] Jung-Chao Ban, Wen-Guei Hu, Song-Sun Lin, and Yin-Heng Lin. Verification of mixing properties in two-dimensional shifts of finite type. *Journal of Mathematical Physics*, 62(7):072703, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Song:2021:PAM

- [677] Xiaoya Song and Yangmin Xiong. Pullback attractors for 2D MHD equations with delays. *Journal of Mathematical Physics*, 62(7):072704, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hoang:2021:RRH

- [678] Vu Hoang, Maria Radosz, Angel Harb, Aaron DeLeon, and Alan Baza. Radiation reaction in higher-order electrodynamics. *Journal of Mathematical Physics*, 62(7):072901, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Celik:2021:SCF

- [679] Emine Celik, Luan Hoang, and Thinh Kieu. Slightly compressible Forchheimer flows in rotating porous media. *Journal of Mathematical Physics*, 62(7):073101, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Holm:2021:SEW

- [680] Darryl D. Holm and Ruiiao Hu. Stochastic effects of waves on currents in the ocean mixed layer. *Journal of Mathematical Physics*, 62(7):073102, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

DeMasi:2021:RFL

- [681] A. De Masi, I. Merola, and E. Presutti. Reservoirs, Fick law, and the Darken effect. *Journal of Mathematical Physics*, 62(7):073301, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Forrester:2021:RBM

- [682] Peter J. Forrester and Anas A. Rahman. Relations between moments for the Jacobi and Cauchy random matrix ensembles. *Journal of Mathematical Physics*, 62(7):073302, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ceniceros:2021:ECI

- [683] Jose Cenicerros, Mohamed Elhamdadi, and Alireza Mashaghi. Enhancement of the coloring invariant for folded molecular chains. *Journal of Mathematical Physics*, 62(7):073501, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ortenzi:2021:BHB

- [684] Giovanni Ortenzi and Marco Pedroni. Boussinesq hierarchy and bi-Hamiltonian geometry. *Journal of Mathematical Physics*, 62(7):073502, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Gubbiotti:2021:SSN

- [685] G. Gubbiotti and M. C. Nucci. Superintegrable systems in non-Euclidean plane: Hidden symmetries leading to linearity. *Journal of Mathematical Physics*, 62(7):073503, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Celik:2021:LCD

- [686] Salih Celik. Left-covariant differential calculi on $GL_q(2)$. *Journal of Mathematical Physics*, 62(7):073504, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Forrester:2021:CEP

- [687] P. J. Forrester and G. Mazzuca. The classical β ensembles with β proportional to $1/N$: From loop equations to Dyson's disordered chain. *Journal of Mathematical Physics*, 62(7):073505, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. Special collection in honor of Freeman Dyson.

Jitomirskaya:2021:UBT

- [688] Svetlana Jitomirskaya and Wencai Liu. Upper bounds on transport exponents for long-range operators. *Journal of Mathematical Physics*, 62(7):073506, July 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhao:2021:WZA

- [689] Wenqiang Zhao. Wong–Zakai approximations of the non-autonomous stochastic FitzHugh–Nagumo system on \mathbb{R}^N in higher regular spaces. *Journal of Mathematical Physics*, 62(8):081501, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Tin:2021:DNS

- [690] Phan Van Tin. On the derivative nonlinear Schrödinger equation on the half line with Robin boundary condition. *Journal of Mathematical Physics*, 62(8):081502, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hafner:2021:STD

- [691] Dietrich Häfner, Mokdad Mokdad, and Jean-Philippe Nicolas. Scattering theory for Dirac fields inside a Reissner–Nordström-type black hole. *Journal of Mathematical Physics*, 62(8):081503, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Esfahani:2021:DSF

- [692] Amin Esfahani. Dynamics of solutions of a fractional NLS system with quadratic interaction. *Journal of Mathematical Physics*, 62(8):081504, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lin:2021:GSL

- [693] Ying-Chieh Lin, Kuan-Hsiang Wang, and Tsung fang Wu. Ground states for a linearly coupled indefinite Schrödinger system with steep potential well. *Journal of Mathematical Physics*, 62(8):081505, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Radobolja:2021:GA

- [694] G. Radobolja. Galilean W_3 algebra. *Journal of Mathematical Physics*, 62(8):081701, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bagheri:2021:QSS

- [695] Zahra Bagheri and Esmail Peyghan. Quadratic and symplectic structures on 3-(Hom)- ρ -Lie algebras. *Journal of Mathematical Physics*, 62(8):081702, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kapustin:2021:CIP

- [696] Anton Kapustin, Nikita Sopenko, and Bowen Yang. A classification of invertible phases of bosonic quantum lattice systems in one dimension. *Journal of Mathematical Physics*, 62(8):081901, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Pierobon:2021:RHL

- [697] Gianfranco Pierobon, Gianfranco Cariolaro, and Giuseppe Dattoli. On the role of Hermite-like polynomials in the Fock representations of Gaussian states. *Journal of Mathematical Physics*, 62(8):082101, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Schlue:2021:OFS

- [698] Volker Schlue. Optical functions in de Sitter. *Journal of Mathematical Physics*, 62(8):082501, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Llibre:2021:DSS

- [699] Jaume Llibre and Claudia Valls. Dynamics of the Szekeres system. *Journal of Mathematical Physics*, 62(8):082502, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Penna:2021:ERW

- [700] Robert F. Penna. Einstein–Rosen waves and the Geroch group. *Journal of Mathematical Physics*, 62(8):082503, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Figotin:2021:EPD

- [701] Alexander Figotin. Exceptional points of degeneracy in traveling wave tubes. *Journal of Mathematical Physics*, 62(8):082701, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ahn:2021:EBC

- [702] Hyunjin Ahn, Seung-Yeal Ha, Hansol Park, and Woojoo Shim. Emergent behaviors of Cucker–Smale flocks on the hyperboloid. *Journal of Mathematical Physics*, 62(8):082702, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Sousa:2021:RFD

- [703] J. Vanterler da C. Sousa, M. Vellappandi, V. Govindaraj, and Gastão S. F. Frederico. Reachability of fractional dynamical systems using ψ -Hilfer pseudo-fractional derivative. *Journal of Mathematical Physics*, 62(8):082703, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

You:2021:RCN

- [704] Zhongli You, Michal Feckan, and JinRong Wang. On the relative controllability of neutral delay differential equations. *Journal of Mathematical Physics*, 62(8):082704, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhu:2021:TVS

- [705] Jian-Zhou Zhu. Thermodynamic and vortic structures of real Schur flows. *Journal of Mathematical Physics*, 62(8):083101, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Djenidi:2021:MTO

- [706] L. Djenidi and R. A. Antonia. Modeling the third-order velocity structure function in the scaling range at finite Reynolds numbers. *Journal of Mathematical Physics*, 62(8):083102, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Nguyen:2021:LDP

- [707] Nhu N. Nguyen and George Yin. Large deviation principles for Langevin equations in random environment and applications. *Journal of Mathematical Physics*, 62(8):083301, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bonnemain:2021:LCC

- [708] Thibault Bonnamain, Thierry Gobron, and Denis Ullmo. Lax connection and conserved quantities of quadratic mean field games. *Journal of Mathematical Physics*, 62(8):083302, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Andraus:2021:LTS

- [709] Sergio Andraus, Kilian Hermann, and Michael Voit. Limit theorems and soft edge of freezing random matrix models via dual orthogonal polynomials. *Journal of Mathematical Physics*, 62(8):083303, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lenzi:2021:STF

- [710] E. K. Lenzi and L. R. Evangelista. Space-time fractional diffusion equations in d -dimensions. *Journal of Mathematical Physics*, 62(8):083304, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lauritsen:2021:FWC

- [711] Asbjørn Bækgaard Lauritsen. Floating Wigner crystal and periodic jellium configurations. *Journal of Mathematical Physics*, 62(8):083305, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jain:2021:CLR

- [712] Vishesh Jain, Indrajit Jana, Kyle Luh, and Sean O'Rourke. Circular law for random block band matrices with genuinely sublinear bandwidth. *Journal of Mathematical Physics*, 62(8):083306, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bernard:2021:HOL

- [713] Pierre-Antoine Bernard, Nicolas Crampé, Dounia Shaaban Kabakibo, and Luc Vinet. Heun operator of Lie type and the modified algebraic Bethe ansatz. *Journal of Mathematical Physics*, 62(8):083501, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Magee:2021:GTS

- [714] Adam M. Magee and Ludwik Dąbrowski. Gauge transformations of spectral triples with twisted real structures. *Journal of Mathematical Physics*, 62(8):083502, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Isaev:2021:SCO

- [715] A. P. Isaev and S. O. Krivonos. Split Casimir operator for simple Lie algebras, solutions of Yang–Baxter equations, and Vogel parameters. *Journal of Mathematical Physics*, 62(8):083503, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Schulze-Halberg:2021:CDT

- [716] Axel Schulze-Halberg. Characterization of Darboux transformations for quantum systems with quadratically energy-dependent potentials. *Journal of Mathematical Physics*, 62(8):083504, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Stepanov:2021:GFS

- [717] Yuriy Stepanov, Hendrik Herrmann, and Thomas Guhr. Generic features in the spectral decomposition of correlation matrices. *Journal of Mathematical Physics*, 62(8):083505, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yang:2021:CHF

- [718] Yi Yang, Lumin Geng, and Jipeng Cheng. CKP hierarchy and free bosons. *Journal of Mathematical Physics*, 62(8):083506, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Braga:2021:ANI

- [719] Gastão A. Braga, Jussara M. Moreira, and Camila F. Souza. Asymptotics for nonlinear integral equations with a generalized heat kernel using renormalization group technique II: Marginal perturbations and logarithmic corrections to the time decay of solutions. *Journal of Mathematical Physics*, 62(8):083507, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Dorodnitsyn:2021:DSW

- [720] V. A. Dorodnitsyn and E. I. Kaptsov. Discrete shallow water equations preserving symmetries and conservation laws. *Journal of Mathematical Physics*, 62(8):083508, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Nikitin:2021:SSP

- [721] A. G. Nikitin. Symmetries of the Schrödinger–Pauli equation for neutral particles. *Journal of Mathematical Physics*, 62(8):083509, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Berkowitz:2021:AES

- [722] Daniel Berkowitz. Applying the Euclidean-signature semi-classical method to the quantum Taub models with a cosmological constant and aligned electromagnetic field. *Journal of Mathematical Physics*, 62(8):083510, August 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Figueiredo:2021:ELE

- [723] Giovany Figueiredo, Sandra Moreira Neto, and Ricardo Ruviano. Existence of least energy positive and nodal solutions for a quasilinear Schrödinger problem with potentials vanishing at infinity. *Journal of Mathematical Physics*, 62(9):091501, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Watson:2021:EFM

- [724] Alexander B. Watson and Mitchell Luskin. Existence of the first magic angle for the chiral model of bilayer graphene. *Journal of Mathematical Physics*, 62(9):091502, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yang:2021:BPP

- [725] Shaojie Yang, Xuanxuan Han, and Tingting Wang. Blow-up phenomena and peakons for the gFQXL/gCH–mCH equation. *Journal of Mathematical Physics*, 62(9):091503, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fujiwara:2021:GES

- [726] Kazumasa Fujiwara and Vladimir Georgiev. On global existence of L^2 solutions for 1D periodic NLS with quadratic nonlinearity. *Journal of Mathematical Physics*, 62(9):091504, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jia:2021:TPL

- [727] Chen Jia, Zhimin Zhang, and Lewei Zhao. Two-parameter localization for eigenfunctions of a Schrödinger operator in balls and spherical shells.

Journal of Mathematical Physics, 62(9):091505, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Luo:2021:GCS

- [728] Zhaonan Luo, Zhijun Qiao, and Zhaoyang Yin. Globally conservative solutions for the modified Camassa–Holm (MOCH) equation. *Journal of Mathematical Physics*, 62(9):091506, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2021:SCS

- [729] Qi Zhang. Sign-changing solutions for a kind of Klein–Gordon–Maxwell system. *Journal of Mathematical Physics*, 62(9):091507, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Meng:2021:LES

- [730] Yuxi Meng, Xingrui Zhang, and Xiaoming He. Least energy sign-changing solutions for a class of fractional Kirchhoff–Poisson system. *Journal of Mathematical Physics*, 62(9):091508, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2021:RWS

- [731] Yanqing Wang, Baoquan Yuan, Jiefeng Zhao, and Daoguo Zhou. On the regularity of weak solutions of the MHD equations in BMO^{-1} and $\dot{B}_{\infty,\infty}^{-1}$. *Journal of Mathematical Physics*, 62(9):091509, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ren:2021:LTB

- [732] Guoqiang Ren and Bin Liu. Large time behavior of solutions to a quasi-linear attraction-repulsion chemotaxis model with nonlinear secretion. *Journal of Mathematical Physics*, 62(9):091510, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

He:2021:LNS

- [733] Rui He and Xiangqing Liu. Localized nodal solutions for semiclassical Choquard equations. *Journal of Mathematical Physics*, 62(9):091511, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ding:2021:NRL

- [734] Min Ding and Lang He. Non-relativistic limits and stability of composite wave patterns to the relativistic Euler equations. *Journal of Mathematical Physics*, 62(9):091512, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wu:2021:DSP

- [735] Derchy Wu. The direct scattering problem for perturbed Kadomtsev–Petviashvili multi line solitons. *Journal of Mathematical Physics*, 62(9):091513, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Das:2021:TRB

- [736] Apurba Das. Twisted Rota–Baxter operators and Reynolds operators on Lie algebras and NS–Lie algebras. *Journal of Mathematical Physics*, 62(9):091701, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lee:2021:RCT

- [737] Jinyeop Lee. Rate of convergence toward Hartree type equations for mixture condensates with factorized initial data. *Journal of Mathematical Physics*, 62(9):091901, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

daCosta:2021:SQM

- [738] Bruno G. da Costa, Genilson A. C. da Silva, and Ignacio S. Gomez. Supersymmetric quantum mechanics and coherent states for a deformed oscillator with position-dependent effective mass. *Journal of Mathematical Physics*, 62(9):092101, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Shea:2021:GGY

- [739] Meredith Shea. Generalized Gelfand-yaglom formula for a discretized quantum mechanic system. *Journal of Mathematical Physics*, 62(9):092102, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Aerts:2021:VBC

- [740] Diederik Aerts and Massimiliano Sassoli de Bianchi. Violation of the Bell–CHSH inequality and marginal laws in a single-entity Bell-test experiment. *Journal of Mathematical Physics*, 62(9):092103, September

2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Golenia:2021:BPA

- [741] Sylvain Golénia and Marc-Adrien Mandich. Bands of pure absolutely continuous spectrum for lattice Schrödinger operators with a more general long range condition. *Journal of Mathematical Physics*, 62(9):092104, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Holevo:2021:AIG

- [742] A. S. Holevo. Accessible information of a general quantum Gaussian ensemble. *Journal of Mathematical Physics*, 62(9):092201, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Haah:2021:CQC

- [743] Jeongwan Haah. Clifford quantum cellular automata: Trivial group in 2D and Witt group in 3D. *Journal of Mathematical Physics*, 62(9):092202, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See erratum [1095].

Walter:2021:HMC

- [744] Michael Walter and Freek Witteveen. Hypergraph min-cuts from quantum entropies. *Journal of Mathematical Physics*, 62(9):092203, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Muller-Hermes:2021:DPD

- [745] Alexander Müller-Hermes. Decomposable Pauli diagonal maps and tensor squares of qubit maps. *Journal of Mathematical Physics*, 62(9):092204, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bergh:2021:LSQ

- [746] Bjarne Bergh, Robert Salzmänn, and Nilanjana Datta. The $\alpha \rightarrow 1$ limit of the sharp quantum Rényi divergence. *Journal of Mathematical Physics*, 62(9):092205, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Shirokov:2021:UCB

- [747] M. E. Shirokov. Uniform continuity bounds for characteristics of multipartite quantum systems. *Journal of Mathematical Physics*, 62(9):

092206, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Osetrin:2021:EMP

- [748] Konstantin Osetrin, Evgeny Osetrin, and Altair Filippov. Exact models of pure radiation in r^2 gravity for spatially homogeneous wave-like Shapovalov spacetimes type II. *Journal of Mathematical Physics*, 62(9):092501, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kobayashi:2021:UTL

- [749] Katsuki Kobayashi and Satoshi Tsujimoto. The ultradiscrete Toda lattice and the Smith normal form of bidiagonal matrices. *Journal of Mathematical Physics*, 62(9):092701, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2021:SASb

- [750] Xiaohu Wang, Kening Lu, and Bixiang Wang. Stationary approximations of stochastic wave equations on unbounded domains with critical exponents. *Journal of Mathematical Physics*, 62(9):092702, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Dhanalakshmi:2021:ESI

- [751] K. Dhanalakshmi and P. Balasubramaniam. Exponential stability of impulsive fractional neutral stochastic differential equations. *Journal of Mathematical Physics*, 62(9):092703, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Deng:2021:GES

- [752] Yanxia Deng and Slim Ibrahim. Global existence and singularity of Hill's lunar problem with strong potential. *Journal of Mathematical Physics*, 62(9):092901, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Majic:2021:IPC

- [753] Matt Majic. Images of point charges in conducting ellipses and prolate spheroids. *Journal of Mathematical Physics*, 62(9):092902, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Boritchev:2021:IRN

- [754] Alexandre Boritchev, Daniel Eceizabarrena, and Victor Vilaça Da Rocha. Intermittency of Riemann's non-differentiable function through the fourth-order flatness. *Journal of Mathematical Physics*, 62(9):093101, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yassin:2021:NMB

- [755] Houssam Yassin. Normal modes with boundary dynamics in geophysical fluids. *Journal of Mathematical Physics*, 62(9):093102, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Assi:2021:DML

- [756] I. A. Assi, A. D. Alhaidari, and H. Bahlouli. Deformed Morse-like potential. *Journal of Mathematical Physics*, 62(9):093501, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

DelasCuevas:2021:ATD

- [757] Gemma De las Cuevas, Andreas Klingler, and Tim Netzer. Approximate tensor decompositions: Disappearance of many separations. *Journal of Mathematical Physics*, 62(9):093502, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hovhannisyan:2021:LSN

- [758] Gro Hovhannisyan. Lax systems and nonlinear equations on a time-space scale. *Journal of Mathematical Physics*, 62(9):093503, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hrivnak:2021:DCS

- [759] Jirí Hrivnák and Lenka Motlochová. Discrete cosine and sine transforms generalized to honeycomb lattice II. Zigzag boundaries. *Journal of Mathematical Physics*, 62(9):093504, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Pfefferle:2021:GFM

- [760] David Pfefferlé, Lyle Noakes, and David Perrella. Gauge freedom in magnetostatics and the effect on helicity in toroidal volumes. *Journal of Mathematical Physics*, 62(9):093505, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Burby:2021:NSS

- [761] J. W. Burby and E. Hirvijoki. Normal stability of slow manifolds in nearly periodic Hamiltonian systems. *Journal of Mathematical Physics*, 62(9):093506, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Cheng:2021:LTA

- [762] Qiaoyuan Cheng, Yiling Yang, and Engui Fan. Long-time asymptotic behavior of a mixed Schrödinger equation with weighted Sobolev initial data. *Journal of Mathematical Physics*, 62(9):093507, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Biswas:2021:DQM

- [763] Indranil Biswas. Deformation quantization of moduli spaces of Higgs bundles on a Riemann surface with translation structure. *Journal of Mathematical Physics*, 62(9):093508, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Li:2021:SMC

- [764] Chuanyong Li and Qingling Shi. Symmetries of the multi-component supersymmetric (ABC)-type KP hierarchies. *Journal of Mathematical Physics*, 62(9):093509, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2021:DMS

- [765] Zi-Yi Wang, Shou-Fu Tian, and Jia Cheng. The $\bar{\partial}$ -dressing method and soliton solutions for the three-component coupled Hirota equations. *Journal of Mathematical Physics*, 62(9):093510, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Aragones-Soria:2021:CRG

- [766] Y. Aragonés-Soria, J. Åberg, C-Y. Park, and M. J. Kastoryano. Classical restrictions of generic matrix product states are quasi-locally Gibbsian. *Journal of Mathematical Physics*, 62(9):093511, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jonnadula:2021:SFT

- [767] Bhargavi Jonnadula, Jonathan P. Keating, and Francesco Mezzadri. Symmetric function theory and unitary invariant ensembles. *Journal*

of *Mathematical Physics*, 62(9):093512, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. Special collection in honor of Freeman Dyson.

Lemoula:2021:KSS

- [768] Romuald K. K. Lemoula, Brice A. Kamdem, Victor K. Kuetché, Raïssa S. Noule, Jean J. Defo, and Saliou Youssoufa. Kruskal’s simplification scheme in ferrite dynamics. *Journal of Mathematical Physics*, 62(9):093513, September 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2021:ECI

- [769] Zhipeng Zhang. Energy conservation for the incompressible inhomogeneous Euler–Korteweg equations in a bounded domain. *Journal of Mathematical Physics*, 62(10):101501, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Sun:2021:IPC

- [770] Meina Sun. The intrinsic phenomena of cavitation and concentration in Riemann solutions for the isentropic two-phase model with the logarithmic equation of state. *Journal of Mathematical Physics*, 62(10):101502, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Sciacca:2021:TSA

- [771] M. Sciacca, F. X. Alvarez, D. Jou, and J. Bafaluy. Thermal solitons along wires with flux-limited lateral exchange. *Journal of Mathematical Physics*, 62(10):101503, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Beck:2021:FHI

- [772] T. Beck and D. Jerison. The Friedland–Hayman inequality and Caffarelli’s contraction theorem. *Journal of Mathematical Physics*, 62(10):101504, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bardos:2021:DLV

- [773] Claude Bardos and Nicolas Besse. Diffusion limit of the Vlasov equation in the weak turbulent regime. *Journal of Mathematical Physics*, 62(10):101505, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ammari:2021:BSC

- [774] Habib Ammari, Bryn Davies, Erik Orvehed Hiltunen, Hyundae Lee, and Sanghyeon Yu. Bound states in the continuum and Fano resonances in subwavelength resonator arrays. *Journal of Mathematical Physics*, 62(10):101506, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2021:IDR

- [775] Tingting Zhang. The invariant domain of Riemann solution for 1D non-isentropic gas dynamics equations. *Journal of Mathematical Physics*, 62(10):101507, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Saanouni:2021:ICN

- [776] Tarek Saanouni and Radhia Ghanmi. Inhomogeneous coupled non-linear Schrödinger systems. *Journal of Mathematical Physics*, 62(10):101508, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

He:2021:GCW

- [777] Cheng He and Changzheng Qu. Global conservative weak solutions for the two-component Novikov equation. *Journal of Mathematical Physics*, 62(10):101509, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhong:2021:EIP

- [778] Penghong Zhong, Ye Chen, and Ganshan Yang. The estimates of the ill-posedness index of the (deformed-) continuous Heisenberg spin equation. *Journal of Mathematical Physics*, 62(10):101510, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wu:2021:FNS

- [779] Fan Wu. Fractional Navier–Stokes regularity criterion involving the positive part of the intermediate eigenvalue of the strain matrix. *Journal of Mathematical Physics*, 62(10):101511, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Dereli:2021:BWN

- [780] Tekin Dereli and Todor Popov. Bloch waves and non-commutative tori of magnetic translations. *Journal of Mathematical Physics*, 62(10):101701, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Rasmussen:2021:DFW

- [781] Jørgen Rasmussen and Mark A. Walton. Demazure formula for A_n Weyl polytope sums. *Journal of Mathematical Physics*, 62(10):101702, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Rao:2021:GCO

- [782] S. Eswara Rao. Generalized Casimir operators for Lie superalgebras. *Journal of Mathematical Physics*, 62(10):101703, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Atakishiyeva:2021:AI

- [783] Mesuma Atakishiyeva, Natig Atakishiyev, and Alexei Zhedanov. An algebraic interpretation of the intertwining operators associated with the discrete Fourier transform. *Journal of Mathematical Physics*, 62(10):101704, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fischbacher:2021:EEB

- [784] Christoph Fischbacher and Oluwadara Ogunkoya. Entanglement entropy bounds in the higher spin XXZ chain. *Journal of Mathematical Physics*, 62(10):101901, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Allen:2021:SSQ

- [785] Theodore J. Allen. Spin in Schrödinger-quantized pseudoclassical systems. *Journal of Mathematical Physics*, 62(10):102101, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kulkarni:2021:SRR

- [786] Shailesh Kulkarni and Rajeev K. Pathak. “Striped” rectangular rigid box with Hermitian and non-Hermitian PT symmetric potentials. *Journal of Mathematical Physics*, 62(10):102102, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See comment [970].

Truong:2021:MEW

- [787] T. T. Truong. Moyal equation-Wigner distribution functions for anharmonic oscillators. *Journal of Mathematical Physics*, 62(10):102103, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yang:2021:VPS

- [788] Jianhao M. Yang. Variational principle for stochastic mechanics based on information measures. *Journal of Mathematical Physics*, 62(10):102104, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Okay:2021:CTT

- [789] Cihan Okay. Commutative d -torsion K -theory and its applications. *Journal of Mathematical Physics*, 62(10):102201, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Gorantla:2021:MVF

- [790] Pranay Gorantla, Ho Tat Lam, Nathan Seiberg, and Shu-Heng Shao. A modified Villain formulation of fractons and other exotic theories. *Journal of Mathematical Physics*, 62(10):102301, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. Special collection in honor of Freeman Dyson.

Runkel:2021:TFT

- [791] Ingo Runkel and Lóránt Szegedy. Topological field theory on r -spin surfaces and the Arf-invariant. *Journal of Mathematical Physics*, 62(10):102302, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Freidel:2021:QGD

- [792] Laurent Freidel, Christophe Goeller, and Etera R. Livine. The quantum gravity disk: Discrete current algebra. *Journal of Mathematical Physics*, 62(10):102303, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhao:2021:CEF

- [793] Peng Zhao, David Hilditch, and Juan A. Valiente Kroon. The conformal Einstein field equations and the local extension of future null infinity. *Journal of Mathematical Physics*, 62(10):102501, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Sheykin:2021:GEB

- [794] A. A. Sheykin, M. V. Markov, and S. A. Paston. Global embedding of BTZ spacetime using generalized method of symmetric embeddings construction. *Journal of Mathematical Physics*, 62(10):102502, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kamiya:2021:CPD

- [795] R. Kamiya, M. Kanki, T. Mase, and T. Tokihiro. Coprimeness-preserving discrete KdV type equation on an arbitrary dimensional lattice. *Journal of Mathematical Physics*, 62(10):102701, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ogle:2021:NCS

- [796] C. Ogle, O. Costin, and M. Bevis. Non-convergence of the spherical harmonic expansion of gravitational potential below the Brillouin sphere: The continuous case. *Journal of Mathematical Physics*, 62(10):102901, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Le:2021:EWD

- [797] Thi Thai Le. Effect of water depth on Kelvin–Helmholtz instability in a shallow water flow. *Journal of Mathematical Physics*, 62(10):103101, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fernandez:2021:LPT

- [798] Roberto Fernández, Manuel González-Navarrete, Eugene Pechersky, and Anatoly Yambartsev. Lack of phase transitions in staggered magnetic systems. A comparison of uniqueness criteria. *Journal of Mathematical Physics*, 62(10):103301, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Forrester:2021:DDL

- [799] Peter J. Forrester. Dyson’s disordered linear chain from a random matrix theory viewpoint. *Journal of Mathematical Physics*, 62(10):103302, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. Special collection in honor of Freeman Dyson.

Bercu:2021:AAR

- [800] Bernard Bercu and Fabien Montégut. Asymptotic analysis of random walks on ice and graphite. *Journal of Mathematical Physics*, 62(10):103303, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kostrobij:2021:GDE

- [801] P. Kostrobij, M. Tokarchuk, B. Markovych, and I. Ryzha. Generalized diffusion equation with nonlocality of space-time: Analytical and numerical analysis. *Journal of Mathematical Physics*, 62(10):103304, Octo-

ber 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Takatsu:2021:CCC

- [802] Asuka Takatsu. Change the coefficients of conditional entropies in extensivity. *Journal of Mathematical Physics*, 62(10):103305, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Veliev:2021:SOP

- [803] O. A. Veliev. On the Schrödinger operator with a periodic PT-symmetric matrix potential. *Journal of Mathematical Physics*, 62(10):103501, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Levin:2021:GPH

- [804] A. Levin, M. Olshanetsky, and A. Zotov. Generalizations of parabolic Higgs bundles, real structures, and integrability. *Journal of Mathematical Physics*, 62(10):103502, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Han:2021:CVA

- [805] Xiaosen Han, Genggeng Huang, and Yisong Yang. Coexisting vortices and antivortices generated by dually gauged harmonic maps. *Journal of Mathematical Physics*, 62(10):103503, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Weisbart:2021:IGF

- [806] David Weisbart. On infinitesimal generators and Feynman–Kac integrals of adelic diffusion. *Journal of Mathematical Physics*, 62(10):103504, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhu:2021:HMZ

- [807] Yuanran Zhu and Daniele Venturi. Hypocoellipticity and the Mori–Zwanzig formulation of stochastic differential equations. *Journal of Mathematical Physics*, 62(10):103505, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fernandez:2021:CSS

- [808] Francisco M. Fernández. Comment on “Solution of Schrödinger equation for two different potentials using extended Nikiforov–Uvarov method and

polynomial solutions of biconfluent Heun equation” [J. Math. Phys. **59**, 053501 (2018)]. *Journal of Mathematical Physics*, 62(10):104101, October 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [10].

Fan:2021:ABS

- [809] Huiying Fan and Meng Wang. Asymptotic behavior of the stationary magnetohydrodynamic equations in an exterior domain. *Journal of Mathematical Physics*, 62(11):111501, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Dietze:2021:DEN

- [810] Charlotte Dietze. Dispersive estimates for nonlinear Schrödinger equations with external potentials. *Journal of Mathematical Physics*, 62(11):111502, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Himonas:2021:NRP

- [811] A. Alexandrou Himonas, Carlos Madrid, and Fangchi Yan. The Neumann and Robin problems for the Korteweg-de Vries equation on the half-line. *Journal of Mathematical Physics*, 62(11):111503, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Huang:2021:LWS

- [812] Xiangdi Huang and Wei Yan. Local weak solution of the isentropic compressible Navier–Stokes equations. *Journal of Mathematical Physics*, 62(11):111504, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Liu:2021:FKT

- [813] Senli Liu and Haibo Chen. Fractional Kirchhoff-type equation with singular potential and critical exponent. *Journal of Mathematical Physics*, 62(11):111505, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ho:2021:SPL

- [814] Ky Ho, Yun-Ho Kim, and Jongrak Lee. Schrödinger p -Laplace equations in \mathbf{R}^N involving indefinite weights and critical growth. *Journal of Mathematical Physics*, 62(11):111506, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2021:USC

- [815] Jintao Wang, Chunqiu Li, Lu Yang, and Mo Jia. Upper semi-continuity of random attractors and existence of invariant measures for nonlocal stochastic Swift–Hohenberg equation with multiplicative noise. *Journal of Mathematical Physics*, 62(11):111507, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Liu:2021:BVB

- [816] Aichao Liu and Binxiang Dai. Blow-up vs boundedness in a two-species attraction-repulsion chemotaxis system with two chemicals. *Journal of Mathematical Physics*, 62(11):111508, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Severo:2021:APQ

- [817] Uberlandio B. Severo and Diogo de S. Germano. Asymptotically periodic quasilinear Schrödinger equations with critical exponential growth. *Journal of Mathematical Physics*, 62(11):111509, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Peng:2021:ARC

- [818] Hongyun Peng. On the attraction-repulsion chemotaxis system with volume-filling effect. *Journal of Mathematical Physics*, 62(11):111510, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Sopenko:2021:ITD

- [819] Nikita Sopenko. An index for two-dimensional SPT states. *Journal of Mathematical Physics*, 62(11):111901, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Inoue:2021:AAN

- [820] Hiroshi Inoue. An algebraic approach of non-self-adjoint Hamiltonians in Krein spaces. *Journal of Mathematical Physics*, 62(11):112101, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Morchio:2021:MTO

- [821] G. Morchio and F. Strocchi. Manifold topology, observables, and gauge group. *Journal of Mathematical Physics*, 62(11):112102, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Burbanks:2021:RCA

- [822] Andrew D. Burbanks, Andrew H. Osbaldestin, and Judi A. Thurlby. Rigorous computer-assisted bounds on the period doubling renormalization fixed point and eigenfunctions in maps with critical point of degree 4. *Journal of Mathematical Physics*, 62(11):112701, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Liu:2021:RIM

- [823] Xianming Liu. Random invariant manifolds of stochastic evolution equations driven by Gaussian and non-Gaussian noises. *Journal of Mathematical Physics*, 62(11):112702, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wei:2021:MPS

- [824] Hui Wei, Mu Ma, and Shuguan Ji. Multiple periodic solutions for an asymptotically linear wave equation with x -dependent coefficients. *Journal of Mathematical Physics*, 62(11):112703, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ramond:2021:NMI

- [825] Paul Ramond and Jérôme Perez. New methods of isochrone mechanics. *Journal of Mathematical Physics*, 62(11):112704, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kumar:2021:DIT

- [826] Narender Kumar, S. B. Bhardwaj, Vinod Kumar, Ram Mehar Singh, and Fakir Chand. Dynamical invariants for time-dependent real and complex Hamiltonian systems. *Journal of Mathematical Physics*, 62(11):112705, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See publisher's note [865].

Arustamyan:2021:NEB

- [827] Nickolas Arustamyan, Christopher Cox, Erik Lundberg, Sean Perry, and Zvi Rosen. On the number of equilibria balancing Newtonian point masses with a central force. *Journal of Mathematical Physics*, 62(11):112901, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zamparo:2021:CFR

- [828] Marco Zamparo. Critical fluctuations in renewal models of statistical mechanics. *Journal of Mathematical Physics*, 62(11):113301, Novem-

ber 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Poria:2021:UPF

- [829] Anirudha Poria. Uncertainty principles for the Fourier and the short-time Fourier transforms. *Journal of Mathematical Physics*, 62(11):113501, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bikram:2021:CPO

- [830] Panchugopal Bikram and Rajeeb R. Mohanta. Contractivity properties of Ornstein–Uhlenbeck semigroup for mixed q -Araki–Woods von Neumann algebras. *Journal of Mathematical Physics*, 62(11):113502, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Rudnick:2021:RPR

- [831] Zeév Rudnick and Igor Wigman. The Robin problem on rectangles. *Journal of Mathematical Physics*, 62(11):113503, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. Special collection in honor of Freeman Dyson.

Huh:2021:TCB

- [832] Youngsik Huh, Hyoungjun Kim, and Seungsang Oh. Tight conformation of 2-bridge knots using superhelices. *Journal of Mathematical Physics*, 62(11):113504, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fabbri:2021:ARI

- [833] Luca Fabbri and Andre G. Campos. Angular-radial integrability of Coulomb-like potentials in Dirac equations. *Journal of Mathematical Physics*, 62(11):113505, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fu:2021:STC

- [834] Zhengqi Fu and Xiong Li. Spectral type of a class of random Jacobi operators. *Journal of Mathematical Physics*, 62(11):113506, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Giusti:2021:EDR

- [835] Andrea Giusti. Erratum: “Dispersion relations for the time-fractional Cattaneo–Maxwell heat equation” [*J. Math. Phys.* **59**, 013506 (2018)].

Journal of Mathematical Physics, 62(11):119901, November 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [9].

Buoso:2021:SAB

- [836] Davide Buoso, Paolo Luzzini, Luigi Provenzano, and Joachim Stubbe. On the spectral asymptotics for the buckling problem. *Journal of Mathematical Physics*, 62(12):121501, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Guo:2021:RCA

- [837] Zhengguang Guo, Yu Wang, and Yeping Li. Regularity criteria of axisymmetric weak solutions to the 3D MHD equations. *Journal of Mathematical Physics*, 62(12):121502, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Dong:2021:ASC

- [838] Jianwei Dong and Litao Zhang. Analytical solutions to the 1D compressible isothermal Navier–Stokes equations with density-dependent viscosity. *Journal of Mathematical Physics*, 62(12):121503, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yu:2021:NUD

- [839] Yanghai Yu and Xiaolei Yang. Non-uniform dependence on initial data for the 2D MHD–Boussinesq equations. *Journal of Mathematical Physics*, 62(12):121504, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chen:2021:MSC

- [840] Yongpeng Chen and Miaomiao Niu. The multiplicity of solutions for the critical Schrödinger–Poisson system with competing potentials. *Journal of Mathematical Physics*, 62(12):121505, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zheng:2021:GWS

- [841] Pan Zheng. Global weak solution in a p -Laplacian Keller–Segel system with nonlinear sensitivity and saturation effect. *Journal of Mathematical Physics*, 62(12):121506, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Huang:2021:NCL

- [842] Juan Huang, Yulin Li, and Yunya Yang. A new criterion and the limit of blowup solutions for a generalized Davey–Stewartson system. *Journal of Mathematical Physics*, 62(12):121507, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Tu:2021:CQS

- [843] Kaifei Tu and Yongkuan Cheng. On a class of quasilinear Schrödinger equations with the supercritical growth. *Journal of Mathematical Physics*, 62(12):121508, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Nakamura:2021:CPK

- [844] Makoto Nakamura. The Cauchy problem for the Klein–Gordon equation under the quartic potential in the de Sitter spacetime. *Journal of Mathematical Physics*, 62(12):121509, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Alhussein:2021:HCU

- [845] H. Alhussein and P. Kolesnikov. On the Hochschild cohomology of universal enveloping associative conformal algebras. *Journal of Mathematical Physics*, 62(12):121701, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Rybakov:2021:ASN

- [846] Filipp N. Rybakov and Egor Babaev. The absence of superconductivity in the next-to-leading order Ginzburg–Landau functional for Bardeen–Cooper–Schrieffer superconductor. *Journal of Mathematical Physics*, 62(12):121901, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Na:2021:RQZ

- [847] Kyungsun Na. Revisiting quantum Zeno effect and anti-Zeno effect: Universality vs non-universality. *Journal of Mathematical Physics*, 62(12):122101, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Li:2021:LRP

- [848] Wen-Du Li and Wu-Sheng Dai. Long-range potential scattering: Converting long-range potential to short-range potential by tortoise coordinate. *Journal of Mathematical Physics*, 62(12):122102, December 2021.

CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Soto-Eguibar:2021:BPT

- [849] Francisco Soto-Eguibar, Felipe A. Asenjo, Sergio A. Hojman, and Héctor M. Moya-Cessa. Bohm potential for the time dependent harmonic oscillator. *Journal of Mathematical Physics*, 62(12):122103, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Beigi:2021:IQH

- [850] Salman Beigi. Improved quantum hypercontractivity inequality for the qubit depolarizing channel. *Journal of Mathematical Physics*, 62(12):122201, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kuipers:2021:SQR

- [851] Folkert Kuipers. Stochastic quantization of relativistic theories. *Journal of Mathematical Physics*, 62(12):122301, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kennon:2021:SMM

- [852] Aaron Kennon. Spin(7)-manifolds and multisymplectic geometry. *Journal of Mathematical Physics*, 62(12):122302, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ahn:2021:EBD

- [853] Hyunjin Ahn, Seung-Yeal Ha, and Woojoo Shim. Emergent behaviors of the discrete thermodynamic Cucker–Smale model on complete Riemannian manifolds. *Journal of Mathematical Physics*, 62(12):122701, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Burby:2021:INF

- [854] J. W. Burby, N. Duignan, and J. D. Meiss. Integrability, normal forms, and magnetic axis coordinates. *Journal of Mathematical Physics*, 62(12):122901, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

deLeon:2021:CLD

- [855] Manuel de León, Manuel Laínz, Miguel C. Muñoz-Lecanda, and Narciso Román-Roy. Constrained Lagrangian dissipative contact dynamics.

Journal of Mathematical Physics, 62(12):122902, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hittmeir:2021:DSI

- [856] Sabine Hittmeir, Rupert Klein, Annette Müller, and Peter Névir. The dynamic state index with moisture and phase changes. *Journal of Mathematical Physics*, 62(12):123101, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Subag:2021:CCS

- [857] Eliran Subag and Ofer Zeitouni. Concentration of the complexity of spherical pure p -spin models at arbitrary energies. *Journal of Mathematical Physics*, 62(12):123301, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. Special collection in honor of Freeman Dyson.

Breiten:2021:SGD

- [858] Tobias Breiten, Carsten Hartmann, Lara Neureither, and Upanshu Sharma. Stochastic gradient descent and fast relaxation to thermodynamic equilibrium: a stochastic control approach. *Journal of Mathematical Physics*, 62(12):123302, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhu:2021:NFG

- [859] Jin-Yan Zhu and Yong Chen. A new form of general soliton solutions and multiple zeros solutions for a higher-order Kaup–Newell equation. *Journal of Mathematical Physics*, 62(12):123501, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Barth:2021:AEE

- [860] Simon Barth, Andreas Bitter, and Semjon Vugalter. The absence of the Efimov effect in systems of one- and two-dimensional particles. *Journal of Mathematical Physics*, 62(12):123502, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kolupaiev:2021:ASS

- [861] Oleksii Kolupaiev. Anomalous singularity of the solution of the vector Dyson equation in the critical case. *Journal of Mathematical Physics*, 62(12):123503, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bao:2021:LBB

- [862] Aiguo Bao and Xianfa Song. Lower bound for the blowup time of the solution to a quasi-linear parabolic system. *Journal of Mathematical Physics*, 62(12):123504, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Naber:2021:ZFT

- [863] M. G. Naber. The zeta function for the triangular potential. *Journal of Mathematical Physics*, 62(12):123505, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hennig:2021:EES

- [864] Dirk Hennig and Nikos I. Karachalios. Existence of exponentially spatially localized breather solutions for lattices of nonlinearly coupled particles: Schauder’s fixed point theorem approach. *Journal of Mathematical Physics*, 62(12):123506, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kumar:2021:PND

- [865] Narender Kumar, S. B. Bhardwaj, Vinod Kumar, Ram Mehar Singh, and Fakir Chand. Publisher’s note: “Dynamical invariants for time-dependent real and complex Hamiltonian systems” [j. math. phys. **62**, 112705 (2021)]. *Journal of Mathematical Physics*, 62(12):129901, December 2021. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [826].

He:2022:RPW

- [866] Fen He, Tingting Chen, Qingling Zhang, and Zhen Wang. Riemann problems and wave interactions for a non-symmetric Keyfitz–Kranzer system with a source term. *Journal of Mathematical Physics*, 63(1):011501, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hu:2022:CSN

- [867] Congcong Hu and Weiming Liu. Construction of solutions for the non-linear magnetic Schrödinger equation in RN. *Journal of Mathematical Physics*, 63(1):011502, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2022:GSD

- [868] Jianping Wang. Global solutions of a doubly tactic resource consumption model with logistic source. *Journal of Mathematical Physics*, 63

(1):011503, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Xiao:2022:TDG

- [869] Wei Xiao and WeiLi Li. The two dimensional gas expansion problem of the Euler equations for a class of pressure laws. *Journal of Mathematical Physics*, 63(1):011504, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Freire:2022:PPC

- [870] Igor Leite Freire. Persistence properties of a Camassa–Holm type equation with $(n+1)$ -order non-linearities. *Journal of Mathematical Physics*, 63(1):011505, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yang:2022:GWP

- [871] Xinying Yang and Xin Zhong. Global well-posedness and decay estimates to the 3D Cauchy problem of nonhomogeneous magneto-micropolar fluid equations with vacuum. *Journal of Mathematical Physics*, 63(1):011506, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Benhellal:2022:SAD

- [872] Badreddine Benhellal. Spectral analysis of Dirac operators with delta interactions supported on the boundaries of rough domains. *Journal of Mathematical Physics*, 63(1):011507, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhu:2022:UAR

- [873] Xiangming Zhu and Chengkui Zhong. Uniform attractors for reaction-diffusion equations with a larger class of external forces. *Journal of Mathematical Physics*, 63(1):011508, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hintz:2022:QMS

- [874] Peter Hintz and YuQing Xie. Quasinormal modes of small Schwarzschild-de Sitter black holes. *Journal of Mathematical Physics*, 63(1):011509, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ndogmo:2022:ICF

- [875] J. C. Ndogmo. Integrable classes of a family of evolution equations. *Journal of Mathematical Physics*, 63(1):011510, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ramos:2022:EBE

- [876] A. J. A. Ramos, T. A. Apalara, M. M. Freitas, and M. L. Araújo. Equivalence between exponential stabilization and boundary observability for swelling problem. *Journal of Mathematical Physics*, 63(1):011511, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fan:2022:MCP

- [877] Haining Fan and Xiaochun Liu. On the multiplicity and concentration of positive solutions to a Kirchhoff-type problem with competing potentials. *Journal of Mathematical Physics*, 63(1):011512, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Butorac:2022:HAA

- [878] Marijana Butorac and Slaven Kozić. On the Heisenberg algebra associated with the rational R -matrix. *Journal of Mathematical Physics*, 63(1):011701, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Henheik:2022:ATT

- [879] Joscha Henheik and Stefan Teufel. Adiabatic theorem in the thermodynamic limit: Systems with a uniform gap. *Journal of Mathematical Physics*, 63(1):011901, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ogata:2022:DBC

- [880] Yoshiko Ogata. A derivation of braided C^* -tensor categories from gapped ground states satisfying the approximate Haag duality. *Journal of Mathematical Physics*, 63(1):011902, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Buchholz:2022:PC

- [881] Detlev Buchholz. Proper condensates. *Journal of Mathematical Physics*, 63(1):011903, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fulsche:2022:STS

- [882] Robert Fulsche and Medet Nursultanov. Spectral theory for Sturm–Liouville operators with measure potentials through Otelbaev’s function. *Journal of Mathematical Physics*, 63(1):012101, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Haynes:2022:LSS

- [883] Alan Haynes and Roland Roeder. Level spacing statistics for the multi-dimensional quantum harmonic oscillator: Algebraic case. *Journal of Mathematical Physics*, 63(1):012102, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. Special collection in honor of Freeman Dyson.

Sanchez-Mendoza:2022:IDS

- [884] Daniel Sánchez-Mendoza. The integrated density of states of the 1D discrete Anderson–Bernoulli model at rational energies. *Journal of Mathematical Physics*, 63(1):012103, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lee:2022:RMP

- [885] Heon Lee. Relativistic massive particle with spin-1/2: a vector bundle point of view. *Journal of Mathematical Physics*, 63(1):012201, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Rajchel-Mieldzioc:2022:AGS

- [886] Grzegorz Rajchel-Mieldzioc, Kamil Korzekwa, Zbigniew Puchała, and Karol Zyczkowski. Algebraic and geometric structures inside the Birkhoff polytope. *Journal of Mathematical Physics*, 63(1):012202, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Cercle:2022:LCF

- [887] Baptiste Cerclé. Liouville conformal field theory on even-dimensional spheres. *Journal of Mathematical Physics*, 63(1):012301, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kyriakopoulos:2022:RIS

- [888] E. Kyriakopoulos. Regular interior solutions to the solution of Kerr which satisfy the weak and the strong energy conditions. *Journal of Mathematical Physics*, 63(1):012501, January 2022. CODEN JMAPAQ. ISSN

0022-2488 (print), 1089-7658 (electronic), 1527-2427. See publisher's note [932].

Yang:2022:DIA

- [889] Kexiang Yang, Ercai Chen, and Xiaoyao Zhou. Dynamical intricacy and average sample complexity for random bundle transformations. *Journal of Mathematical Physics*, 63(1):012701, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Byeon:2022:AFD

- [890] Junhyeok Byeon, Seung-Yeal Ha, and Jeongho Kim. Asymptotic flocking dynamics of a relativistic Cucker–Smale flock under singular communications. *Journal of Mathematical Physics*, 63(1):012702, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Liu:2022:SLT

- [891] Pan Liu and Genqian Liu. Some Liouville-type theorems for the stationary density-dependent Navier–Stokes equations. *Journal of Mathematical Physics*, 63(1):013101, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ma:2022:WDC

- [892] Xiaohui Ma, Mohamed El Machkouri, and Xiequan Fan. On Wasserstein-1 distance in the central limit theorem for elephant random walk. *Journal of Mathematical Physics*, 63(1):013301, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Carbonaro:2022:RPI

- [893] Bruno Carbonaro. The role of the principle of inertia in KTAP models. *Journal of Mathematical Physics*, 63(1):013302, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lewandowski:2022:HSB

- [894] Max Lewandowski. Hadamard states for bosonic quantum field theory on globally hyperbolic spacetimes. *Journal of Mathematical Physics*, 63(1):013501, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Briet:2022:SOD

- [895] Philippe Briet and David Krejciřík. Spectral optimization of Dirac rectangles. *Journal of Mathematical Physics*, 63(1):013502, January 2022.

CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Liu:2022:ATT

- [896] Yixuan Liu, Guoliang Shi, and Jun Yan. Ambarzumyan-type theorem for third order linear measure differential equations. *Journal of Mathematical Physics*, 63(1):013503, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Derezinski:2022:MAR

- [897] Jan Dereziński and Oskar Grocholski. Momentum approach to the $1/r^2$ potential as a toy model of the Wilsonian renormalization. *Journal of Mathematical Physics*, 63(1):013504, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Feinberg:2022:WMC

- [898] Joshua Feinberg and Miloslav Znojil. Which metrics are consistent with a given pseudo-hermitian matrix? *Journal of Mathematical Physics*, 63(1):013505, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zuniga-Galindo:2022:GLZ

- [899] W. A. Zúñiga-Galindo, B. A. Zambrano-Luna, and E. León-Cardenal. Graphs, local zeta functions, log-Coulomb gases, and phase transitions at finite temperature. *Journal of Mathematical Physics*, 63(1):013506, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Charbonneau:2022:CND

- [900] Benoit Charbonneau, Anuk Dayaprema, C. J. Lang, Ákos Nagy, and Haoyang Yu. Construction of Nahm data and BPS monopoles with continuous symmetries. *Journal of Mathematical Physics*, 63(1):013507, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhao:2022:LQR

- [901] Kai Zhao and Wei-Shih Yang. The localization of quantum random walks on Sierpinski gaskets. *Journal of Mathematical Physics*, 63(1):013508, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Jecko:2022:AER

- [902] Thierry Jecko. On the analyticity of electronic reduced densities for molecules. *Journal of Mathematical Physics*, 63(1):013509, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Rao:2022:RCB

- [903] Jiguang Rao, Jingsong He, and Boris A. Malomed. Resonant collisions between lumps and periodic solitons in the Kadomtsev–Petviashvili I equation. *Journal of Mathematical Physics*, 63(1):013510, January 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Simon:2022:TTM

- [904] Barry Simon. Twelve tales in mathematical physics: an expanded Heine–man prize lecture. *Journal of Mathematical Physics*, 63(2):021101, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Li:2022:GWPa

- [905] Jinkai Li and Guozhi Yuan. Global well-posedness of z -weak solutions to the primitive equations without vertical diffusivity. *Journal of Mathematical Physics*, 63(2):021501, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chiang:2022:GEL

- [906] Yuan-Jen Chiang and Changhua Wei. Global existence and lifespan of smooth solutions of biwave maps. *Journal of Mathematical Physics*, 63(2):021502, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Qi:2022:MVS

- [907] Kunlun Qi. Measure valued solution to the spatially homogeneous Boltzmann equation with inelastic long-range interactions. *Journal of Mathematical Physics*, 63(2):021503, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Liu:2022:GST

- [908] Kai-Kai Liu and Yun-Rui Yang. Global stability of traveling waves for a SIR model with nonlocal dispersal and delay. *Journal of Mathematical Physics*, 63(2):021504, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2022:NGS

- [909] Penghui Zhang and Zhiqing Han. Normalized ground states for Kirchhoff equations in \mathbb{R}^3 with a critical nonlinearity. *Journal of Mathematical Physics*, 63(2):021505, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

D’Aprile:2022:NSB

- [910] Teresa D’Aprile. Non-symmetric blowing-up solutions for a class of Liouville equations in the ball. *Journal of Mathematical Physics*, 63(2):021506, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ma:2022:VST

- [911] Luyi Ma, Hong-Tao Niu, and Zhi-Cheng Wang. V-shaped traveling fronts of fractional Allen–Cahn equations. *Journal of Mathematical Physics*, 63(2):021507, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Cai:2022:UCS

- [912] Hong Cai, Geng Chen, Yi Du, and Yannan Shen. Uniqueness of conservative solutions to a one-dimensional general quasilinear wave equation through variational principle. *Journal of Mathematical Physics*, 63(2):021508, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2022:SAL

- [913] Hong-Yi Zhang and Yu-Feng Zhang. Spectral analysis and long-time asymptotics of complex mKdV equation. *Journal of Mathematical Physics*, 63(2):021509, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Mazorchuk:2022:SHC

- [914] Volodymyr Mazorchuk and Rafael Mrden. $f\downarrow_2$ -Harish-Chandra modules for $f\downarrow_2 L(4)$. *Journal of Mathematical Physics*, 63(2):021701, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2022:YBA

- [915] Na Wang and Ke Wu. Yang–Baxter algebra and MacMahon representation. *Journal of Mathematical Physics*, 63(2):021702, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Dessano:2022:PSS

- [916] H. Dessano, G. X. A. Petronilo, R. G. G. Amorim, and A. E. Santana. Phase space Schrödinger equation and quadratic friction. *Journal of Mathematical Physics*, 63(2):022101, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bachelot:2022:DSN

- [917] Alain Bachelot. The Dirac sea for the non-separable Hilbert spaces. *Journal of Mathematical Physics*, 63(2):022102, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kameoka:2022:CAP

- [918] Kentaro Kameoka. Complex absorbing potential method for Stark resonances. *Journal of Mathematical Physics*, 63(2):022103, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hernandez:2022:RDW

- [919] Felipe Hernández and C. Jess Riedel. Rapidly decaying Wigner functions are Schwartz functions. *Journal of Mathematical Physics*, 63(2):022104, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Vidick:2022:ASQ

- [920] Thomas Vidick. Almost synchronous quantum correlations. *Journal of Mathematical Physics*, 63(2):022201, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Gicquaud:2022:ESL

- [921] Romain Gicquaud. Existence of solutions to the Lichnerowicz equation: a new proof. *Journal of Mathematical Physics*, 63(2):022501, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2022:RAE

- [922] Ming Wang, Zhiming Liu, and Jianhua Huang. Regular attractor of the β -evolution equation with fractional damping on \mathbf{R}^n . *Journal of Mathematical Physics*, 63(2):022701, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

deLeon:2022:GHJ

- [923] Manuel de León, Manuel Lainz, and Asier López-Gordón. Geometric Hamilton–Jacobi theory for systems with external forces. *Journal of*

Mathematical Physics, 63(2):022901, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Maggi:2022:DRE

- [924] Rocco Maggi, Elisa Ercolessi, Paolo Facchi, Giuseppe Marmo, Saverio Pascazio, and Francesco V. Pepe. Dimensional reduction of electromagnetism. *Journal of Mathematical Physics*, 63(2):022902, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Yoshida:2022:KOF

- [925] Zensho Yoshida and Philip J. Morrison. The kinetic origin of the fluid helicity-A symmetry in the kinetic phase space. *Journal of Mathematical Physics*, 63(2):023101, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Woolls:2022:HCP

- [926] Michael Woolls and Leonid P. Pryadko. Homology-changing percolation transitions on finite graphs. *Journal of Mathematical Physics*, 63(2):023301, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Domrin:2022:MSW

- [927] A. V. Domrin, M. A. Shumkin, and B. I. Suleimanov. Meromorphy of solutions for a wide class of ordinary differential equations of Painlevé type. *Journal of Mathematical Physics*, 63(2):023501, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Astaburuaga:2022:SRO

- [928] M. A. Astaburuaga, V. H. Cortés, C. Fernández, and R. Del Río. Singular rank one perturbations. *Journal of Mathematical Physics*, 63(2):023502, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Liu:2022:TFV

- [929] Wencai Liu. Topics on Fermi varieties of discrete periodic Schrödinger operators. *Journal of Mathematical Physics*, 63(2):023503, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chakraborty:2022:STR

- [930] Anwesha Chakraborty, Partha Nandi, and Biswajit Chakraborty. Spectral triple with real structure on fuzzy sphere. *Journal of Mathematical*

Physics, 63(2):023504, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Obukhov:2022:AIM

- [931] Valeriy V. Obukhov. Algebras of integrals of motion for the Hamilton–Jacobi and Klein–Gordon–Fock equations in spacetime with four-parameter groups of motions in the presence of an external electromagnetic field. *Journal of Mathematical Physics*, 63(2):023505, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kyriakopoulos:2022:PNR

- [932] E. Kyriakopoulos. Publisher’s note: “Regular interior solutions to the solution of Kerr which satisfy the weak and the strong energy conditions” [J. Math. Phys. **63**, 012501 (2022)]. *Journal of Mathematical Physics*, 63(2):029901, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [888].

Olbermann:2022:GVC

- [933] H. Olbermann. Godunov variables and convex entropy for relativistic fluid dynamics with bulk viscosity. *Journal of Mathematical Physics*, 63(3):031501, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lee:2022:SSE

- [934] Ho Lee and Jiho Lee. Small solutions of the Einstein–Boltzmann-scalar field system in a spatially flat FLRW spacetime. *Journal of Mathematical Physics*, 63(3):031502, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Shi:2022:PLK

- [935] Zhiheng Shi and Sihua Liang. On the p -Laplacian Kirchhoff–Schrödinger equation with potentials vanishing or unbounded at infinity in \mathbf{R}^3 . *Journal of Mathematical Physics*, 63(3):031503, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Nie:2022:VFP

- [936] Yongsheng Nie, Jin Hao, and Hanchun Yang. Vanishing flux perturbation, pressure, and magnetic field limit in a Chaplygin magnetogasdynamics. *Journal of Mathematical Physics*, 63(3):031504, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

deHoop:2022:IPR

- [937] Maarten V. de Hoop and Alexei Iantchenko. Inverse problem for the Rayleigh system with spectral data. *Journal of Mathematical Physics*, 63(3):031505, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See publisher’s note [988].

Lu:2022:GEI

- [938] Peng Lu and Yi Zhou. Global existence of ideal invicid compressible and heat-conductive fluids with radial symmetry. *Journal of Mathematical Physics*, 63(3):031506, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Xu:2022:GSC

- [939] Fuyi Xu, Ai Huang, and Peng Fu. The global solvability of the Cauchy problem for a multi-dimensional chemotaxis-Navier–Stokes system modeling coral fertilization. *Journal of Mathematical Physics*, 63(3):031507, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Carbou:2022:SSS

- [940] G. Carbou, M. Moussaoui, and R. Rachi. Stability of steady states in ferromagnetic rings. *Journal of Mathematical Physics*, 63(3):031508, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hamano:2022:ECI

- [941] Masaru Hamano and Masahiro Ikeda. Equivalence of conditions on initial data below the ground state to NLS with a repulsive inverse power potential. *Journal of Mathematical Physics*, 63(3):031509, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2022:GSS

- [942] Teng Wang, Xiang Wang, and Rong Zhang. Global strong solutions to planar radiative magnetohydrodynamic equations with density-dependent viscosity and degenerate heat-conductivity. *Journal of Mathematical Physics*, 63(3):031510, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Krasnov:2022:SPO

- [943] Kirill Krasnov. Spin(11, 3), particles, and octonions. *Journal of Mathematical Physics*, 63(3):031701, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kraisler:2022:CSE

- [944] Joseph Kraisler and John C. Schotland. Collective spontaneous emission and kinetic equations for one-photon light in random media. *Journal of Mathematical Physics*, 63(3):031901, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Krishnaswami:2022:QRR

- [945] Govind S. Krishnaswami and T. R. Vishnu. Quantum Rajeev–Ranken model as an anharmonic oscillator. *Journal of Mathematical Physics*, 63(3):032101, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Borasi:2022:FDS

- [946] Luigi Borasi. Finite dimensional systems of free fermions and diffusion processes on spin groups. *Journal of Mathematical Physics*, 63(3):032102, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hamza:2022:OWP

- [947] Danish Ali Hamza, Tasawar Abbas, Muhammad Asjad, Muhammad Imran, and Rameez ul Islam. Observing wave-particle behavior of entangled atoms in cavity assisted delayed-choice experiment. *Journal of Mathematical Physics*, 63(3):032103, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Shekarriz:2022:NCO

- [948] Mohammad H. Shekarriz and Karl Svozil. Noncontextual coloring of orthogonality hypergraphs. *Journal of Mathematical Physics*, 63(3):032104, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Farshi:2022:MLR

- [949] Tom Farshi, Daniele Toniolo, Carlos E. González-Guillén, Álvaro M. Alhambra, and Lluís Masanes. Mixing and localization in random time-periodic quantum circuits of Clifford unitaries. *Journal of Mathematical Physics*, 63(3):032201, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Cameron:2022:AFH

- [950] Peter Cameron and Piotr T. Chruściel. Asymptotic flatness in higher dimensions. *Journal of Mathematical Physics*, 63(3):032501, March 2022.

CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fournodavlos:2022:FDF

- [951] Grigorios Fournodavlos. Future dynamics of FLRW for the massless-scalar field system with positive cosmological constant. *Journal of Mathematical Physics*, 63(3):032502, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hohmann:2022:MFF

- [952] Manuel Hohmann, Christian Pfeifer, and Nicoleta Voicu. Mathematical foundations for field theories on Finsler spacetimes. *Journal of Mathematical Physics*, 63(3):032503, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Pires:2022:IVF

- [953] L. Pires. The initial-value formulation of the λ - R model. *Journal of Mathematical Physics*, 63(3):032504, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Chen:2022:RAS

- [954] Yiju Chen and Xiaohu Wang. Random attractors for stochastic discrete complex Ginzburg–Landau equations with long-range interactions. *Journal of Mathematical Physics*, 63(3):032701, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Omiste:2022:ICM

- [955] Juan J. Omiste, Rosario González-Férez, and Rafael Ortega. An introduction to classical monodromy: Applications to molecules in external fields. *Journal of Mathematical Physics*, 63(3):032702, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Hu:2022:RAS

- [956] Wenjie Hu and Quanxin Zhu. Random attractors for a stochastic age-structured population model. *Journal of Mathematical Physics*, 63(3):032703, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Landon:2022:FEF

- [957] Benjamin Landon. Free energy fluctuations of the two-spin spherical SK model at critical temperature. *Journal of Mathematical Physics*, 63

(3):033301, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Simon:2022:SGL

- [958] Barry Simon. The strong Gauss–Lucas theorem and analyticity of correlation functions via the Lee–Yang theorem. *Journal of Mathematical Physics*, 63(3):033302, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. Special collection in honor of Freeman Dyson.

Coletti:2022:SLF

- [959] Cristian F. Coletti and Leon A. Valencia. Scaling limit for a family of coalescing radial random paths absorbed at the origin. *Journal of Mathematical Physics*, 63(3):033303, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Bose:2022:TDF

- [960] Arup Bose, Shambhu Nath Maurya, and Koushik Saha. Time dependent fluctuations of linear eigenvalue statistics of some patterned matrices. *Journal of Mathematical Physics*, 63(3):033304, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Spohn:2022:HEA

- [961] Herbert Spohn. Hydrodynamic equations for the Ablowitz–Ladik discretization of the nonlinear Schrödinger equation. *Journal of Mathematical Physics*, 63(3):033305, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. Special collection in honor of Freeman Dyson.

Chen:2022:SMK

- [962] Huizhan Chen, Jipeng Cheng, and Zhiwei Wu. Super modified KP hierarchy in Kac–van de Leur construction. *Journal of Mathematical Physics*, 63(3):033501, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Peng:2022:DTP

- [963] Wei-Qi Peng and Yong Chen. Double and triple pole solutions for the Gerdjikov–Ivanov type of derivative nonlinear Schrödinger equation with zero/nonzero boundary conditions. *Journal of Mathematical Physics*, 63(3):033502, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Durand:2022:FOM

- [964] Loyal Durand. Fractional operators and multi-integral representations for associated Legendre functions. *Journal of Mathematical Physics*, 63(3):033503, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Said:2022:FPA

- [965] Salem Ben Saïd and Selma Negzaoui. Flett potentials associated with differential-difference Laplace operators. *Journal of Mathematical Physics*, 63(3):033504, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Najafizade:2022:RDO

- [966] Amene Najafizade, Hossein Panahi, Won Sang Chung, and Hassan Hasanabadi. A representation of the Dunkl oscillator model on curved spaces: Factorization approach. *Journal of Mathematical Physics*, 63(3):033505, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

DAchille:2022:DTD

- [967] Matteo D’Achille, Aernout C. D. van Enter, and Arnaud Le Ny. Decimations for two-dimensional Ising and rotator models. *Journal of Mathematical Physics*, 63(3):033506, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Skrypnyk:2022:GSP

- [968] T. Skrypnyk. On the general solution of the permuted classical Yang–Baxter equation and quasigraded Lie algebras. *Journal of Mathematical Physics*, 63(3):033507, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Gao:2022:TSC

- [969] Ya Gao, Jing-Hua Li, and Jing Mao. Translating solutions for a class of quasilinear parabolic initial boundary value problems in Lorentz–Minkowski plane R^{1,2}. *Journal of Mathematical Physics*, 63(3):033508, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Fernandez:2022:C

- [970] Francisco M. Fernández. Comment on ‘Striped’ rectangular rigid box with Hermitian and non-Hermitian PT symmetric potentials“ [J. Math. Phys. **62**, 102102 (2021)]. *Journal of Mathematical Physics*, 63(3):

034101, March 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [786].

Auffinger:2022:SCA

- [971] Antonio Auffinger, Gerard Ben Arous, and Zhehua Li. Sharp complexity asymptotics and topological trivialization for the (p, k) spiked tensor model. *Journal of Mathematical Physics*, 63(4):043303, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL <https://pubs.aip.org/aip/jmp/article/63/4/043303/2843034/Sharp-complexity-asymptotics-and-topological>. Special collection in honor of Freeman Dyson.

Li:2022:NSD

- [972] Nianhua Li and Kai Tian. Nonlocal symmetries and Darboux transformations of the Camassa–Holm equation and modified Camassa–Holm equation revisited. *Journal of Mathematical Physics*, 63(4):041501, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Juarez-Campos:2022:SGL

- [973] B. Juarez-Campos, E. I. Kaikina, and A. V. Vázquez-Esquivel. Stochastic Ginzburg–Landau equation on a half-line driven by the multiplicative noise. *Journal of Mathematical Physics*, 63(4):041502, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Zhang:2022:ATA

- [974] Jingxuan Zhang. Adiabatic theory for the area-constrained Willmore flow. *Journal of Mathematical Physics*, 63(4):041503, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Sun:2022:LRG

- [975] Weixian Sun and Zhuan Ye. Low regularity global well-posedness for 2D Boussinesq equations with variable viscosity. *Journal of Mathematical Physics*, 63(4):041504, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Wang:2022:SEE

- [976] Cong Wang and Jiabao Su. The semilinear elliptic equations with double weighted critical exponents. *Journal of Mathematical Physics*, 63(4):041505, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Liu:2022:GET

- [977] Zhengrong Liu. Global existence and time decay of the relativistic BGK equation in the whole space. *Journal of Mathematical Physics*, 63(4):041506, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Warze:2022:SGF

- [978] Simone Warze and Amanda Young. The spectral gap of a fractional quantum Hall system on a thin torus. *Journal of Mathematical Physics*, 63(4):041901, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Huo:2022:SOH

- [979] Qinghai Huo and Guangbin Ren. Structure of octonionic Hilbert spaces with applications in the Parseval equality and Cayley–Dickson algebras. *Journal of Mathematical Physics*, 63(4):042101, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Ha:2022:TEI

- [980] Kil-Chan Ha, Kyung Hoon Han, and Seung-Hyeok Kye. There exist infinitely many kinds of partial separability/entanglement. *Journal of Mathematical Physics*, 63(4):042201, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Kuipers:2022:ACS

- [981] Folkert Kuipers. Analytic continuation of stochastic mechanics. *Journal of Mathematical Physics*, 63(4):042301, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

deOliveira:2022:BCI

- [982] Christyan C. de Oliveira, Ricardo A. Mosna, and João Paulo M. Pitelli. Boundary conditions for isolated asymptotically anti-de Sitter spacetimes. *Journal of Mathematical Physics*, 63(4):042501, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Lieb:2022:EFI

- [983] Elliott H. Lieb and Siddhartha Sahi. On the extension of the FKG inequality to n functions. *Journal of Mathematical Physics*, 63(4):043301, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. Special collection in honor of Freeman Dyson.

Albanese:2022:GSG

- [984] Linda Albanese and Andrea Alessandrelli. On Gaussian spin glass with P -wise interactions. *Journal of Mathematical Physics*, 63(4):043302, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Mazzuca:2022:MDS

- [985] G. Mazzuca. On the mean density of states of some matrices related to the beta ensembles and an application to the Toda lattice. *Journal of Mathematical Physics*, 63(4):043501, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Anantharaman:2022:HGA

- [986] Nalini Anantharaman and Laura Monk. A high-genus asymptotic expansion of Weil-petersson volume polynomials. *Journal of Mathematical Physics*, 63(4):043502, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

McDonald:2022:CEN

- [987] Edward McDonald and Raphaël Ponge. Cwikel estimates and negative eigenvalues of Schrödinger operators on noncommutative tori. *Journal of Mathematical Physics*, 63(4):043503, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

deHoop:2022:PNI

- [988] Maarten V. de Hoop and Alexei Iantchenko. Publisher’s note: “Inverse problem for the Rayleigh system with spectral data” [J. Math. Phys. **63**, 031505 (2022)]. *Journal of Mathematical Physics*, 63(4):049901, April 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. See [937].

Dyatlov:2022:ISI

- [989] Semyon Dyatlov, Svetlana Jitomirskaya, and Zeev Rudnick. Introduction to the special issue: In memory of Jean Bourgain. *Journal of Mathematical Physics*, 63(5):050401, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/050401/2845918/Introduction-to-the-Special-Issue-In-memory-of>.

Brennecke:2022:LES

- [990] Christian Brennecke. The low energy spectrum of trapped bosons in the Gross–Pitaevskii regime. *Journal of Mathematical Physics*, 63(5):

051101, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/051101/2845929/The-low-energy-spectrum-of-trapped-bosons-in-the>.

Bulicek:2022:EAS

- [991] Miroslav Bulíček, Ansgar Jüngel, Milan Pokorný, and Nicola Zamponi. Existence analysis of a stationary compressible fluid model for heat-conducting and chemically reacting mixtures. *Journal of Mathematical Physics*, 63(5):051501, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/051501/2845981/Existence-analysis-of-a-stationary-compressible>.

Chen:2022:SSC

- [992] Hong Chen, Ziqi Wan, and Xin Zhong. Strong solutions to the 2D Cauchy problem of compressible non-isothermal nematic liquid crystal flows with vacuum at infinity. *Journal of Mathematical Physics*, 63(5):051502, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/051502/2845976/Strong-solutions-to-the-2D-Cauchy-problem-of>.

An:2022:LRI

- [993] Xinliang An, Haoyang Chen, and Silu Yin. Low regularity ill-posedness for non-strictly hyperbolic systems in three dimensions. *Journal of Mathematical Physics*, 63(5):051503, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/051503/2845944/Low-regularity-ill-posedness-for-non-strictly>.

Ma:2022:LWP

- [994] Jieqiong Ma, Ruxu Lian, and Qingcun Zeng. Local well-posedness of strong solution to a climate dynamic model with phase transformation of water vapor. *Journal of Mathematical Physics*, 63(5):051504, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/051504/2845964/Local-well-posedness-of-strong-solution-to-a>.

Guo:2022:SSH

- [995] Yuli Guo, Weiguo Zhang, and Leilei Liu. The N -soliton solution to the higher-order nonlinear Schrödinger–Maxwell–Bloch system via the Riemann–Hilbert approach. *Journal of Mathematical Physics*, 63(5):

051505, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/051505/2845973/The-N-soliton-solution-to-the-higher-order>.

Xiao:2022:CEC

- [996] Yingying Xiao, Chuanxi Zhu, and Jianhua Chen. Combined effects of concave and convex nonlinearities for the generalized Chern–Simons–Schrödinger systems with steep potential well and $1 < p < 2 < q < 6$. *Journal of Mathematical Physics*, 63(5):051506, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/051506/2845937/Combined-effects-of-concave-and-convex>.

Ueda:2022:ASY

- [997] Mamoru Ueda. Affine super Yangians and rectangular W -superalgebras. *Journal of Mathematical Physics*, 63(5):051701, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/051701/2845986/Affine-super-Yangians-and-rectangular-W>.

Peyghan:2022:SSH

- [998] Esmaeil Peyghan and Leila Nourmohammadifar. Skew-symmetric hom-algebroids and their representation theory. *Journal of Mathematical Physics*, 63(5):051702, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/051702/2845979/Skew-symmetric-hom-algebroids-and-their>.

Das:2022:DAR

- [999] Apurba Das and Satyendra Kumar Mishra. The L_∞ -deformations of associative Rota–Baxter algebras and homotopy Rota–Baxter operators. *Journal of Mathematical Physics*, 63(5):051703, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/051703/2845914/The-L-deformations-of-associative-Rota-Baxter>.

Bru:2022:CDS

- [1000] J.-B. Bru and W. de Siqueira Pedra. Classical dynamics from self-consistency equations in quantum mechanics. *Journal of Mathematical Physics*, 63(5):052101, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/052101/2845920/Classical-dynamics-from-self-consistency-equations>.

Bon:2022:SSD

- [1001] Enguerrand Lavigne Bon. Semiclassical spectrum of the Dirichlet–Pauli operator on an annulus. *Journal of Mathematical Physics*, 63(5):052102, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/052102/2845933/Semiclassical-spectrum-of-the-Dirichlet-Pauli>

Le:2022:ASU

- [1002] Dai-Nam Le and Van-Hoang Le. Algebraic structure underlying spherical, parabolic, and prolate spheroidal bases of the nine-dimensional MICZ–Kepler problem. *Journal of Mathematical Physics*, 63(5):052103, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/052103/2845954/Algebraic-structure-underlying-spherical-parabolic>.

Marwah:2022:UCB

- [1003] Ashutosh Marwah and Frédéric Dupuis. Uniform continuity bound for sandwiched Rényi conditional entropy. *Journal of Mathematical Physics*, 63(5):052201, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/052201/2845950/Uniform-continuity-bound-for-sandwiched-Renyi>.

Koh:2022:FBI

- [1004] Dax Enshan Koh, Guoming Wang, Peter D. Johnson, and Yudong Cao. Foundations for Bayesian inference with engineered likelihood functions for robust amplitude estimation. *Journal of Mathematical Physics*, 63(5):052202, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/052202/2845960/Foundations-for-Bayesian-inference-with-engineered>

Wang:2022:REC

- [1005] Jinzhao Wang and Henrik Wilming. Revisiting the equality conditions of the data-processing inequality for the sandwiched Rényi divergence. *Journal of Mathematical Physics*, 63(5):052203, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/052203/2845970/Revisiting-the-equality-conditions-of-the-data>.

Araneda:2022:SDY

- [1006] Bernardo Araneda. On self-dual Yang–Mills fields on special complex surfaces. *Journal of Mathematical Physics*, 63(5):052501, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/052501/2845995/On-self-dual-Yang-Mills-fields-on-special-complex>.

Mohamed:2022:ACS

- [1007] Mariem Magdy Ali Mohamed and Juan A. Valiente Kroon. Asymptotic charges for spin-1 and spin-2 fields at the critical sets of null infinity. *Journal of Mathematical Physics*, 63(5):052502, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/052502/2846010/Asymptotic-charges-for-spin-1-and-spin-2-fields-at>.

An:2022:NAF

- [1008] Zhongshan An and Lan-Hsuan Huang. New asymptotically flat static vacuum metrics with near Euclidean boundary data. *Journal of Mathematical Physics*, 63(5):052503, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/052503/2846008/New-asymptotically-flat-static-vacuum-metrics-with>.

Xu:2022:AAD

- [1009] Dongmei Xu and Fuzhi Li. Asymptotically autonomous dynamics for non-autonomous stochastic 2D g -Navier–Stokes equation in regular spaces. *Journal of Mathematical Physics*, 63(5):052701, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/052701/2846001/Asymptotically-autonomous-dynamics-for-non>.

Chang:2022:CDB

- [1010] Qingquan Chang and Dandan Li. Continuity of dynamical behaviors for strongly damped wave equations with perturbation. *Journal of Mathematical Physics*, 63(5):052702, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/052702/2846005/Continuity-of-dynamical-behaviors-for-strongly>.

Calogero:2022:SIV

- [1011] F. Calogero and F. Payandeh. Solution of the initial-value problem of first-order nonlinear recursions with homogeneous right-hand sides. *Journal of Mathematical Physics*, 63(5):052703, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/052703/2845998/Solution-of-the-initial-value-problem-of-first>.

Turova:2022:EDC

- [1012] Tatyana S. Turova. Exponential decay of correlations in the one-dimensional Coulomb gas ensembles. *Journal of Mathematical Physics*, 63(5):053301, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/053301/2846004/Exponential-decay-of-correlations-in-the-one>.

Goto:2022:NTP

- [1013] Shin itiro Goto. Nonequilibrium thermodynamic process with hysteresis and metastable states — a contact Hamiltonian with unstable and stable segments of a Legendre submanifold. *Journal of Mathematical Physics*, 63(5):053302, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/053302/2846031/Nonequilibrium-thermodynamic-process-with>.

Mograby:2022:SDS

- [1014] Gamal Mograby, Radhakrishnan Balu, Kasso A. Okoudjou, and Alexander Teplyaev. Spectral decimation of a self-similar version of almost Mathieu-type operators. *Journal of Mathematical Physics*, 63(5):053501, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/053501/2846014/Spectral-decimation-of-a-self-similar-version-of>.

Guan:2022:MDH

- [1015] Wenchuang Guan, Shen Wang, Weici Guo, and Jipeng Cheng. Modified DKP hierarchy as modified BKP hierarchy. *Journal of Mathematical Physics*, 63(5):053502, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/053502/2845999/Modified-DKP-hierarchy-as-modified-BKP-hierarchy>.

Cipolloni:2022:FSN

- [1016] Giorgio Cipolloni. Fluctuations in the spectrum of non-Hermitian i.i.d. matrices. *Journal of Mathematical Physics*, 63(5):053503, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/053503/2845994/Fluctuations-in-the-spectrum-of-non-Hermitian-i-i>.

Khalkhali:2022:SSD

- [1017] Masoud Khalkhali and Nathan Pagliaroli. Spectral statistics of Dirac ensembles. *Journal of Mathematical Physics*, 63(5):053504, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/053504/2845996/Spectral-statistics-of-Dirac-ensembles>.

Liu:2022:ASL

- [1018] Qun Liu and Daqing Jiang. Analysis of a stochastic logistic model with diffusion and Ornstein–Uhlenbeck process. *Journal of Mathematical Physics*, 63(5):053505, May 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/5/053505/2846024/Analysis-of-a-stochastic-logistic-model-with>.

Lewin:2022:CRG

- [1019] Mathieu Lewin. Coulomb and Riesz gases: The known and the unknown. *Journal of Mathematical Physics*, 63(6):061101, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061101/2845978/Coulomb-and-Riesz-gases-The-known-and-the-unknown>. Special collection in honor of Freeman Dyson.

Bossmann:2022:LES

- [1020] Lea Boßmann. Low-energy spectrum and dynamics of the weakly interacting Bose gas. *Journal of Mathematical Physics*, 63(6):061102, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061102/2845967/Low-energy-spectrum-and-dynamics-of-the-weakly>.

Nam:2022:DBG

- [1021] Phan Thành Nam, Julien Ricaud, and Arnaud Triay. Dilute Bose gas with three-body interaction: Recent results and open questions. *Journal of Mathematical Physics*, 63(6):061103, June

2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061103/2845931/Dilute-Bose-gas-with-three-body-interaction-Recent>.

Bershtein:2022:NSV

- [1022] Mikhail Bershtein and Angelina Vargulevich. NSR singular vectors from Uglov polynomials. *Journal of Mathematical Physics*, 63(6):061706, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061706/2846029/NSR-singular-vectors-from-Uglov-polynomials>.

Chen:2022:LES

- [1023] Xiao-Ping Chen and Chun-Lei Tang. Least energy sign-changing solutions for Kirchhoff-type problems with potential well. *Journal of Mathematical Physics*, 63(6):061501, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061501/2845958/Least-energy-sign-changing-solutions-for-Kirchhoff>.

Ye:2022:BWS

- [1024] Hailong Ye and Chunhua Jin. Bounded weak and strong time periodic solutions to a three-dimensional chemotaxis-Stokes model with porous medium diffusion. *Journal of Mathematical Physics*, 63(6):061502, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061502/2845941/Bounded-weak-and-strong-time-periodic-solutions-to>.

Yuan:2022:GWP

- [1025] Wen-Shuo Yuan and Bin Ge. Global well-posedness for pseudo-parabolic p -Laplacian equation with singular potential and logarithmic nonlinearity. *Journal of Mathematical Physics*, 63(6):061503, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061503/2845949/Global-well-posedness-for-pseudo-parabolic-p>.

Liu:2022:ENS

- [1026] Chuangye Liu and Xiaolong Yang. Existence of normalized solutions for semilinear elliptic systems with potential. *Journal of Mathematical Physics*, 63(6):061504, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061504/2845962/Existence-of-normalized-solutions-for-semilinear>.

Zuo:2022:KTD

- [1027] Jiabin Zuo and Juliana Honda Lopes. The Kirchhoff-type diffusion problem driven by a magnetic fractional Laplace operator. *Journal of Mathematical Physics*, 63(6):061505, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061505/2845917/The-Kirchhoff-type-diffusion-problem-driven-by-a>.

Wang:2022:ILN

- [1028] Jiawei Wang. Incompressible limit of nonisentropic Hookean elastodynamics. *Journal of Mathematical Physics*, 63(6):061506, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061506/2845926/Incompressible-limit-of-nonisentropic-Hookean>.

Wang:2022:WSC

- [1029] Shu Wang and Yabo Ren. Weak solutions to the Cauchy problem of the time-dependent Thomas–Fermi equations. *Journal of Mathematical Physics*, 63(6):061507, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061507/2845969/Weak-solutions-to-the-Cauchy-problem-of-the-time>.

Cao:2022:VPP

- [1030] Daomin Cao, Guolin Qin, and Changjun Zou. Vortex patch problem for steady lake equation. *Journal of Mathematical Physics*, 63(6):061508, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061508/2845915/Vortex-patch-problem-for-steady-lake-equation>.

Zheng:2022:VTB

- [1031] Xiangcheng Zheng, Yiqun Li, and Hong Wang. A viscoelastic Timoshenko beam: Model development, analysis, and investigation. *Journal of Mathematical Physics*, 63(6):061509, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061509/2845922/A-viscoelastic-Timoshenko-beam-Model-development>.

Xie:2022:FMS

- [1032] Qiang Xie, Jiancai Sun, and Hengyun Yang. $U(h)$ -free modules over the super-Galilean conformal algebras. *Journal of Mathematical Physics*, 63(6):061701, June 2022. CODEN JMAPAQ.

ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061701/2845930/U-h-free-modules-over-the-super-Galilean-conformal>.

Bisbo:2022:PID

- [1033] Asmus K. Bisbo and Joris Van der Jeugt. Bases for infinite dimensional simple $U_{\sqrt{2}}(1|2n)$ -modules respecting the branching $U_{\sqrt{2}}(1|2n) \supset U_{\sqrt{2}}(1|n)$. *Journal of Mathematical Physics*, 63(6):061702, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061702/2845936/Bases-for-infinite-dimensional-simple-osp-1-2n>.

Datt:2022:ECS

- [1034] Gopal Datt and Bhawna Bansal Gupta. Essential commutativity and spectral properties of slant Hankel operators over Lebesgue spaces. *Journal of Mathematical Physics*, 63(6):061703, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061703/2845946/Essential-commutativity-and-spectral-properties-of>.

Bergeron:2022:RSA

- [1035] Geoffroy Bergeron, Julien Gaboriaud, Luc Vinet, and Alexei Zhedanov. The rational Sklyanin algebra and the Wilson and para-Racah polynomials. *Journal of Mathematical Physics*, 63(6):061704, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061704/2845953/The-rational-Sklyanin-algebra-and-the-Wilson-and>.

Edelman:2022:CDC

- [1036] Alan Edelman and Sungwoo Jeong. On the Cartan decomposition for classical random matrix ensembles. *Journal of Mathematical Physics*, 63(6):061705, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/061705/2845972/On-the-Cartan-decomposition-for-classical-random>. Special collection in honor of Freeman Dyson.

Aza:2022:TIS

- [1037] N. J. B. Aza, L. C. P. A. M. Müssnich, and A. F. Reyes-Lega. A Z_2 -topological index as a Z_2 -state index. *Journal of Mathematical Physics*, 63(6):061901, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/>

article/63/6/061901/2846036/A-Z2-topological-index-as-a-Z2-state-index.

Benoist:2022:APT

- [1038] Tristan Benoist, Martin Fraas, and Jürg Fröhlich. The appearance of particle tracks in detectors. II. The semi-classical realm. *Journal of Mathematical Physics*, 63(6):062101, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/062101/2846049/The-appearance-of-particle-tracks-in-detectors-II>.

Bluhm:2022:TNA

- [1039] Andreas Bluhm and Ion Nechita. A tensor norm approach to quantum compatibility. *Journal of Mathematical Physics*, 63(6):062201, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/062201/2846040/A-tensor-norm-approach-to-quantum-compatibility>.

Girotti:2022:LDC

- [1040] Federico Girotti, Merlijn van Horssen, Raffaella Carbone, and Mădălin Guță. Large deviations, central limit, and dynamical phase transitions in the atom maser. *Journal of Mathematical Physics*, 63(6):062202, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/062202/2846065/Large-deviations-central-limit-and-dynamical-phase>.

Carlen:2022:TIA

- [1041] Eric A. Carlen and Elliott H. Lieb. A trace inequality of Ando, Hiai, and Okubo and a monotonicity property of the Golden–Thompson inequality. *Journal of Mathematical Physics*, 63(6):062203, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/062203/2846030/A-trace-inequality-of-Ando-Hiai-and-Okubo-and-a>. Special collection in honor of Freeman Dyson.

Chaubey:2022:CLM

- [1042] S. K. Chaubey and Y. J. Suh. Characterizations of Lorentzian manifolds. *Journal of Mathematical Physics*, 63(6):062501, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/062501/2846013/Characterizations-of-Lorentzian-manifolds>.

Fernandes:2022:PCC

- [1043] Antonio Carlos Fernandes, Luis Fernando Mello, Lucas Ruiz dos Santos, and Claudio Vidal. Planar central configurations of six bodies. *Journal of Mathematical Physics*, 63(6):062701, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/062701/2846044/Planar-central-configurations-of-six-bodies>.

Liu:2022:DIN

- [1044] Yang Liu, Shan Ma, and Chunyou Sun. Dynamics for 2D incompressible Navier–Stokes flow coupled with time-dependent Darcy flow. *Journal of Mathematical Physics*, 63(6):062702, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/062702/2846019/Dynamics-for-2D-incompressible-Navier-Stokes-flow>.

Figotin:2022:ATM

- [1045] Alexander Figotin. Analytic theory of multicavity klystrons. *Journal of Mathematical Physics*, 63(6):062703, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/062703/2846071/Analytic-theory-of-multicavity-klystrons>.

Yang:2022:SPM

- [1046] Min Yang and Guanggan Chen. Stability of the Poincaré maps for a stochastic fast–slow system. *Journal of Mathematical Physics*, 63(6):062704, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/062704/2846054/Stability-of-the-Poincare-maps-for-a-stochastic>.

Sanchez-Cerritos:2022:EPR

- [1047] Juan Manuel Sánchez-Cerritos, Liang Ding, and Jinlong Wei. Equilibrium points in restricted problems on S^2 and H^2 . *Journal of Mathematical Physics*, 63(6):062705, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/062705/2846076/Equilibrium-points-in-restricted-problems-on-S2>.

Burdzy:2022:FAR

- [1048] Krzysztof Burdzy, Mauricio Duarte, Carl-Erik Gauthier, C. Robin Graham, and Jaime San Martin. Fermi acceleration in rotating drums. *Journal of Mathematical Physics*, 63(6):062706, June

2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/062706/2846022/Fermi-acceleration-in-rotating-drums>.

Sakajo:2022:QPV

- [1049] Takashi Sakajo and Vikas S. Krishnamurthy. Quantized point vortex equilibria in a one-way interaction model with a Liouville-type background vorticity on a curved torus. *Journal of Mathematical Physics*, 63(6):063101, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/063101/2846058/Quantized-point-vortex-equilibria-in-a-one-way>.

Koukiou:2022:EFG

- [1050] Flora Koukiou. Entropy and freezing in Gaussian models. *Journal of Mathematical Physics*, 63(6):063301, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/063301/2846034/Entropy-and-freezing-in-Gaussian-models>.

Saluto:2022:EFD

- [1051] Lidia Saluto, Liliana Restuccia, and David Jou. Electric field dependence of thermal conductivity in bulk systems and nanosystems with charged mobile defects. *Journal of Mathematical Physics*, 63(6):063302, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/063302/2846097/Electric-field-dependence-of-thermal-conductivity>.

Barhoumi:2022:ITC

- [1052] Ahmad Barhoumi, Pavel Bleher, Alfredo Deaño, and Maxim Yattselev. Investigation of the two-cut phase region in the complex cubic ensemble of random matrices. *Journal of Mathematical Physics*, 63(6):063303, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/063303/2846121/Investigation-of-the-two-cut-phase-region-in-the>. Special collection in honor of Freeman Dyson.

Ramos:2022:LIA

- [1053] A. D. Ramos and C. D. B. da Silva. Locality of the interaction affects dynamics in probabilistic cellular automata. *Journal of Mathematical Physics*, 63(6):063304, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/063304/2846122/Locality-of-the-interaction-affects-dynamics-in-probabilistic-cellular-automata>.

/pubs.aip.org/aip/jmp/article/63/6/063304/2846108/Locality-of-the-interaction-affects-dynamics-in.

Sasaki:2022:ESD

- [1054] Ryu Sasaki. Exactly solvable discrete time birth and death processes. *Journal of Mathematical Physics*, 63(6):063305, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/063305/2846104/Exactly-solvable-discrete-time-birth-and-death>.

Giscard:2022:EIS

- [1055] P.-L. Giscard and A. Tamar. Elementary integral series for Heun functions: Application to black-hole perturbation theory. *Journal of Mathematical Physics*, 63(6):063501, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/063501/2846111/Elementary-integral-series-for-Heun-functions>.

Cartin:2022:KRG

- [1056] Daniel Cartin. Knotted 4-regular graphs: Polynomial invariants and the Pachner moves. *Journal of Mathematical Physics*, 63(6):063502, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/063502/2846119/Knotted-4-regular-graphs-Polynomial-invariants-and>.

Khan:2022:EOF

- [1057] Sohail A. Khan, T. Hayat, A. Alsaedi, and B. Ahmad. Entropy optimized flow of hydromagnetic Reiner–Philippoff fluid over a stretching surface. *Journal of Mathematical Physics*, 63(6):063503, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/063503/2846117/Entropy-optimized-flow-of-hydromagnetic-Reiner>.

Yu:2022:ASP

- [1058] Jianduo Yu, Chuanzhong Li, Mengkun Zhu, and Yang Chen. Asymptotics for a singularly perturbed GUE, Painlevé III, double-confluent Heun equations, and small eigenvalues. *Journal of Mathematical Physics*, 63(6):063504, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/063504/2846113/Asymptotics-for-a-singularly-perturbed-GUE>.

Pastur:2022:EDL

- [1059] L. Pastur. Eigenvalue distribution of large random matrices arising in deep neural networks: Orthogonal case. *Journal of Mathematical Physics*, 63(6):063505, June 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/6/063505/2846100/Eigenvalue-distribution-of-large-random-matrices>. Special collection in honor of Freeman Dyson.

Adami:2022:ESR

- [1060] Riccardo Adami, Filippo Boni, Raffaele Carlone, and Lorenzo Tentarelli. Existence, structure, and robustness of ground states of a NLSE in 3D with a point defect. *Journal of Mathematical Physics*, 63(7):071501, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/071501/2843527/Existence-structure-and-robustness-of-ground>.

Moreno:2022:MAP

- [1061] M. Moreno, P. Riosco, and H. Van Den Bosch. Mixing in anharmonic potential well. *Journal of Mathematical Physics*, 63(7):071502, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/071502/2843589/Mixing-in-anharmonic-potential-well>.

Cassano:2022:DCO

- [1062] Biagio Cassano, Matteo Gallone, and Fabio Pizzichillo. Dirac–Coulomb operators with infinite mass boundary conditions in sectors. *Journal of Mathematical Physics*, 63(7):071503, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/071503/2843559/Dirac-Coulomb-operators-with-infinite-mass>.

Lei:2022:LBR

- [1063] Zhoutong Lei and Zhiqiang Shao. The limit behavior of Riemann solutions to the Euler equations of compressible fluid flow for the modified Chaplygin gas. *Journal of Mathematical Physics*, 63(7):071504, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/071504/2843598/The-limit-behavior-of-Riemann-solutions-to-the->

Zhu:2022:WBP

- [1064] Mingxuan Zhu and Zhenda Li. Wave breaking phenomenon for the generalized FORQ equation. *Journal of Mathematical Physics*, 63(7):071505,

July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/071505/2843532/Wave-breaking-phenomenon-for-the-generalized-FORQ>.

Han:2022:ARS

- [1065] Pengju Han and Yang Chen. Asymptotic relations for semi-classical Laguerre orthogonal polynomials and the associated Hankel determinants. *Journal of Mathematical Physics*, 63(7):071506, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/071506/2843567/Asymptotic-relations-for-semi-classical-Laguerre>.

Guo:2022:RCL

- [1066] Helin Guo and Lingling Zhao. On the regularity criteria for liquid crystal flows involving the gradient of one velocity component. *Journal of Mathematical Physics*, 63(7):071507, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/071507/2843582/On-the-regularity-criteria-for-liquid-crystal>.

Zhang:2022:CFB

- [1067] Fan Zhang. Convexity of the free boundary for an axially symmetric rotational cavity flow problem. *Journal of Mathematical Physics*, 63(7):071508, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/071508/2843592/Convexity-of-the-free-boundary-for-an-axially>.

Huang:2022:AIY

- [1068] Teng Huang. The analysis of inhomogeneous Yang–Mills connections on closed Riemannian manifold. *Journal of Mathematical Physics*, 63(7):071509, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/071509/2843552/The-analysis-of-inhomogeneous-Yang-Mills>.

Boyallian:2022:FVL

- [1069] C. Boyallian and J. Guzman. Formal vertex laws associated to Lie conformal algebras. *Journal of Mathematical Physics*, 63(7):071701, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/071701/2843544/Formal-vertex-laws-associated-to-Lie-conformal>.

Olgiati:2022:RFB

- [1070] Alessandro Olgiati. Reduced fluctuations for bosons in a double well. *Journal of Mathematical Physics*, 63(7):071901, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/071901/2843522/Reduced-fluctuations-for-bosons-in-a-double-well>.

Basti:2022:SOU

- [1071] Giulia Basti. A second order upper bound on the ground state energy of a Bose gas beyond the Gross–Pitaevskii regime. *Journal of Mathematical Physics*, 63(7):071902, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/071902/2843530/A-second-order-upper-bound-on-the-ground-state>. Special collection in honor of Freeman Dyson.

Nam:2022:GSE

- [1072] Phan Thành Nam, Julien Ricaud, and Arnaud Triay. Ground state energy of the low density Bose gas with three-body interactions. *Journal of Mathematical Physics*, 63(7):071903, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/071903/2843539/Ground-state-energy-of-the-low-density-Bose-gas>. Special collection in honor of Freeman Dyson.

Garg:2022:DCM

- [1073] Anupam Garg. The discrete Chebyshev–Meckler–Mermin–Schwarz polynomials and spin algebra. *Journal of Mathematical Physics*, 63(7):072101, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/072101/2843548/The-discrete-Chebyshev-Meckler-Mermin-Schwarz>.

Marcelli:2022:CSA

- [1074] Giovanna Marcelli and Domenico Monaco. From charge to spin: Analogies and differences in quantum transport coefficients. *Journal of Mathematical Physics*, 63(7):072102, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/072102/2843556/From-charge-to-spin-Analogies-and-differences-in>.

Doring:2022:CFT

- [1075] Andreas Döring and Markus Frems. Contextuality and the fundamental theorems of quantum mechanics. *Journal of Mathematical Physics*, 63

(7):072103, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL [https://pubs.aip.org/aip/jmp/article/63/7/072103/2843510/Contextuality-and-the-fundamental-theorems-](https://pubs.aip.org/aip/jmp/article/63/7/072103/2843510/Contextuality-and-the-fundamental-theorems-of) of.

Mead:2022:NTP

- [1076] Lawrence R. Mead, Sungwook Lee, and David Garfinkle. A non-trivial PT-symmetric continuum Hamiltonian and its eigenstates and eigenvalues. *Journal of Mathematical Physics*, 63(7):072104, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/072104/2843566/A-non-trivial-PT-symmetric-continuum-Hamiltonian>. See erratum [1133].

Lonigro:2022:GSB

- [1077] Davide Lonigro. Generalized spin-boson models with non-normalizable form factors. *Journal of Mathematical Physics*, 63(7):072105, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/072105/2843570/Generalized-spin-boson-models-with-non>.

Buyukasik:2022:ETE

- [1078] Şirin A. Büyükaşık and Zehra Çayıç. Exact time-evolution of a generalized two-dimensional quantum parametric oscillator in the presence of time-variable magnetic and electric fields. *Journal of Mathematical Physics*, 63(7):072106, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL [https://pubs.aip.org/aip/jmp/article/63/7/072106/2843584/Exact-time-evolution-of-a-generalized-](https://pubs.aip.org/aip/jmp/article/63/7/072106/2843584/Exact-time-evolution-of-a-generalized-two) two.

Lasser:2022:VVA

- [1079] Caroline Lasser and Chunmei Su. Various variational approximations of quantum dynamics. *Journal of Mathematical Physics*, 63(7):072107, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/072107/2843668/Various-variational-approximations-of-quantum>

Svetlichnyy:2022:DQC

- [1080] Pavel Svetlichnyy and T. A. B. Kennedy. Decay of quantum conditional mutual information for purely generated finitely correlated states. *Journal of Mathematical Physics*, 63(7):072201, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/072201/2843699/Decay-of-quantum-conditional-mutual-information>.

Svampa:2022:AAQ

- [1081] Ilaria Svampa, Stefano Mancini, and Andreas Winter. An approach to p -adic qubits from irreducible representations of $\mathrm{SO}(3)_p$. *Journal of Mathematical Physics*, 63(7):072202, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/072202/2843682/An-approach-to-p-adic-qubits-from-irreducible>.

Seo:2022:QRD

- [1082] Yuki Seo. The quantum \mathfrak{h}_α -Rényi divergence of real order. *Journal of Mathematical Physics*, 63(7):072203, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/072203/2843692/The-quantum-Renyi-divergence-of-real-order>. See erratum [1487].

Hasenohrl:2022:QCD

- [1083] Markus Hasenöhrl and Matthias C. Caro. Quantum and classical dynamical semigroups of superchannels and semicausal channels. *Journal of Mathematical Physics*, 63(7):072204, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/072204/2843710/Quantum-and-classical-dynamical-semigroups-of>.

Huguet:2022:RLO

- [1084] E. Huguet, J. Queva, and J. Renaud. Restriction of Laplace operator on one-forms: From \mathbf{R}^{n+2} and \mathbf{R}^{n+1} ambient spaces to embedded $(A)dS_n$ submanifolds. *Journal of Mathematical Physics*, 63(7):072301, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/072301/2843658/Restriction-of-Laplace-operator-on-one-forms-From>.

Guo:2022:OMG

- [1085] Shuyuan Guo, Gang Meng, Ping Yan, and Meirong Zhang. Optimal maximal gaps of Dirichlet eigenvalues of Sturm–Liouville operators. *Journal of Mathematical Physics*, 63(7):072701, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/072701/2843661/Optimal-maximal-gaps-of-Dirichlet-eigenvalues-of>.

Zhu:2022:CLH

- [1086] Pengxian Zhu and Qigui Yang. Chaos of the 2D linear hyperbolic equation with general van der Pol type boundary condition. *Journal of Math-*

ematical Physics, 63(7):072702, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/072702/2843714/Chaos-of-the-2D-linear-hyperbolic-equation-with>.

Wen:2022:RAS

- [1087] Lan Wen and Lu Yang. Random attractor for stochastic non-autonomous Berger equation with critical exponent. *Journal of Mathematical Physics*, 63(7):072703, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/072703/2843675/Random-attractor-for-stochastic-non-autonomous>.

Bodineau:2022:CED

- [1088] Thierry Bodineau, Isabelle Gallagher, Laure Saint-Raymond, and Sergio Simonella. Cluster expansion for a dilute hard sphere gas dynamics. *Journal of Mathematical Physics*, 63(7):073301, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/073301/2843705/Cluster-expansion-for-a-dilute-hard-sphere-gas>.

Brennecke:2022:RSF

- [1089] Christian Brennecke and Horng-Tzer Yau. The replica symmetric formula for the SK model revisited. *Journal of Mathematical Physics*, 63(7):073302, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/073302/2843656/The-replica-symmetric-formula-for-the-SK-model>.

Katkov:2022:MMH

- [1090] Mikhail Katkov, Michelangelo Naim, Antonios Georgiou, and Misha Tsodyks. Mathematical models of human memory. *Journal of Mathematical Physics*, 63(7):073303, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/073303/2843660/Mathematical-models-of-human-memory>. Special collection in honor of Freeman Dyson. See erratum [1374].

Vanchurin:2022:DEP

- [1091] Vitaly Vanchurin. Differential equation for partition functions and a duality pseudo-forest. *Journal of Mathematical Physics*, 63(7):073501, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/073501/2843666/Differential-equation-for-partition-functions-and>.

Zhang:2022:QHG

- [1092] Senlin Zhang and Shuanhong Wang. Quasitriangular Hopf group-quasialgebras and generalized quantum Yang–Baxter equations. *Journal of Mathematical Physics*, 63(7):073502, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/073502/2843671/Quasitriangular-Hopf-group-quasialgebras-and>.

DelVecchio:2022:LIB

- [1093] Simone Del Vecchio, Jürg Fröhlich, Alessandro Pizzo, and Stefano Rossi. Local iterative block-diagonalization of gapped Hamiltonians: a new tool in singular perturbation theory. *Journal of Mathematical Physics*, 63(7):073503, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/073503/2843679/Local-iterative-block-diagonalization-of-gapped>. Special collection in honor of Freeman Dyson.

Garcia-Pelaez:2022:LPT

- [1094] D. García-Peláez, C. S. López-Monsalvo, and A. Rubio Ponce. Light propagation through optical media using metric contact geometry. *Journal of Mathematical Physics*, 63(7):073504, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/073504/2843741/Light-propagation-through-optical-media-using>.

Haah:2022:ECQ

- [1095] Jeongwan Haah. Erratum: “Clifford quantum cellular automata: Trivial group in 2D and Witt group in 3D” [J. Math. Phys. **62**, 092202 (2021)]. *Journal of Mathematical Physics*, 63(7):079901, July 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/7/079901/2843740/Erratum-Clifford-quantum-cellular-automata-Trivial>. See [743].

Benedikter:2022:EDI

- [1096] Niels Benedikter. Effective dynamics of interacting fermions from semiclassical theory to the random phase approximation. *Journal of Mathematical Physics*, 63(8):081101, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081101/2845977/Effective-dynamics-of-interacting-fermions-from>.

Desiraju:2022:PCC

- [1097] Harini Desiraju. Painlevé/ CFT correspondence on a torus. *Journal of Mathematical Physics*, 63(8):081102, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081102/2845980/Painleve-CFT-correspondence-on-a-torus>.

Shen:2022:SPA

- [1098] Hao Shen. A stochastic PDE approach to large N problems in quantum field theory: a survey. *Journal of Mathematical Physics*, 63(8):081103, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081103/2845992/A-stochastic-PDE-approach-to-large-N-problems-in>.

Bian:2022:STS

- [1099] Dongfen Bian and Xueke Pu. Stability threshold for 2D shear flows of the Boussinesq system near Couette. *Journal of Mathematical Physics*, 63(8):081501, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081501/2845947/Stability-threshold-for-2D-shear-flows-of-the>.

Wu:2022:IEP

- [1100] Weijun Wu, Fujun Zhou, and Yongsheng Li. Incompressible Euler–Poisson limit of the Vlasov–Poisson–Boltzmann system. *Journal of Mathematical Physics*, 63(8):081502, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081502/2845990/Incompressible-Euler-Poisson-limit-of-the-Vlasov>.

Karaki:2022:SKF

- [1101] Zeinab Karaki. Study of the Kramers–Fokker–Planck quadratic operator with a constant magnetic field. *Journal of Mathematical Physics*, 63(8):081503, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081503/2845982/Study-of-the-Kramers-Fokker-Planck-quadratic>.

Wang:2022:BFB

- [1102] Ya-Guang Wang and Shi-Yong Zhu. On back flow of boundary layers in two-dimensional unsteady incompressible heat conducting flow. *Journal of Mathematical Physics*, 63(8):081504, August 2022. CODEN

JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081504/2845942/On-back-flow-of-boundary-layers-in-two-dimensional>.

Djellali:2022:STB

- [1103] Fayssal Djellali and Soraya Labidi. On the stability of a thermodiffusion Bresse system. *Journal of Mathematical Physics*, 63(8):081505, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081505/2845971/On-the-stability-of-a-thermodiffusion-Bresse>.

Choi:2022:ESG

- [1104] Nari Choi. The existence of solutions for the gravitational Maxwell gauged $O(3)$ model on compact surfaces. *Journal of Mathematical Physics*, 63(8):081506, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081506/2845985/The-existence-of-solutions-for-the-gravitational>.

Zhang:2022:MCS

- [1105] Weiqiang Zhang, Yanyun Wen, and Peihao Zhao. Multiplicity and concentration of solutions for fractional Kirchhoff–Choquard equation with critical growth. *Journal of Mathematical Physics*, 63(8):081507, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081507/2845963/Multiplicity-and-concentration-of-solutions-for>.

Bytsko:2022:OPR

- [1106] Andrei Bytsko. On orthogonal projections related to representations of the Hecke algebra on a tensor space. *Journal of Mathematical Physics*, 63(8):081701, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081701/2845939/On-orthogonal-projections-related-to>.

Nazarov:2022:QBS

- [1107] Maxim Nazarov. Quantum Berezinian for a strange Lie superalgebra. *Journal of Mathematical Physics*, 63(8):081702, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081702/2845945/Quantum-Berezinian-for-a-strange-Lie-superalgebra>.

Manogue:2022:ODS

- [1108] Corinne A. Manogue, Tevian Dray, and Robert A. Wilson. Options: an E_8 description of the Standard Model. *Journal of Mathematical Physics*, 63(8):081703, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081703/2845955/Options-An-E8-description-of-the-Standard-Model>.

Jakobsen:2022:AVC

- [1109] Hans Plesner Jakobsen. Algebras of variable coefficient quantized differential operators. *Journal of Mathematical Physics*, 63(8):081704, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081704/2845968/Algebras-of-variable-coefficient-quantized>.

Boyallian:2022:AQC

- [1110] Carina Boyallian and Vanesa Meinardi. An approach to quantum conformal algebra. *Journal of Mathematical Physics*, 63(8):081705, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081705/2845974/An-approach-to-quantum-conformal-algebra>.

Bullivant:2022:CCD

- [1111] Alex Bullivant and Clement Delcamp. Crossing with the circle in Dijkgraaf–Witten theory and applications to topological phases of matter. *Journal of Mathematical Physics*, 63(8):081901, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081901/2845993/Crossing-with-the-circle-in-Dijkgraaf-Witten>.

Rademacher:2022:DRV

- [1112] Simone Rademacher. Dependent random variables in quantum dynamics. *Journal of Mathematical Physics*, 63(8):081902, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081902/2845935/Dependent-random-variables-in-quantum-dynamics>.■

Lemm:2022:BEC

- [1113] Marius Lemm and Oliver Siebert. Bose–Einstein condensation on hyperbolic spaces. *Journal of Mathematical Physics*, 63(8):081903, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081903/2845987/Bose-Einstein-condensation-on-hyperbolic-spaces>.■

Chong:2022:GTS

- [1114] J. J. Chong, L. Lafleche, and C. Saffirio. Global-in-time semiclassical regularity for the Hartree–Fock equation. *Journal of Mathematical Physics*, 63(8):081904, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081904/2846026/Global-in-time-semiclassical-regularity-for-the>.

Buchholz:2022:PCL

- [1115] Detlev Buchholz. Proper condensates and long range order. *Journal of Mathematical Physics*, 63(8):081905, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/081905/2846032/Proper-condensates-and-long-range-order>.

Sunko:2022:ESS

- [1116] D. K. Sunko. Evaluation and spanning sets of confluent Vandermonde forms. *Journal of Mathematical Physics*, 63(8):082101, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/082101/2846027/Evaluation-and-spanning-sets-of-confluent>.

Alhaidari:2022:PAB

- [1117] A. D. Alhaidari. Progressive approximation of bound states by finite series of square-integrable functions. *Journal of Mathematical Physics*, 63(8):082102, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/082102/2846051/Progressive-approximation-of-bound-states-by>.

Tlas:2022:CEI

- [1118] T. Tlas. On the construction of Euclidean invariant and reflection positive measures on the cylindrical compactification of distributions. *Journal of Mathematical Physics*, 63(8):082301, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/082301/2846018/On-the-construction-of-Euclidean-invariant-and-reflection-positive-measures-on-the-cylindrical-compactification-of-distributions>.

Viennot:2022:FSS

- [1119] David Viennot. Fuzzy Schwarzschild $(2 + 1)$ -spacetime. *Journal of Mathematical Physics*, 63(8):082302, August 2022. CODEN JMAPAQ. ISSN

0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/082302/2846064/Fuzzy-Schwarzschild-2-1-spacetime>.

Minucci:2022:MSF

- [1120] Marica Minucci, Rodrigo Panosso Macedo, and Juan A. Valiente Kroon. The Maxwell-scalar field system near spatial infinity. *Journal of Mathematical Physics*, 63(8):082501, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/082501/2846039/The-Maxwell-scalar-field-system-near-spatial>.

Ahn:2022:NLR

- [1121] Hyunjin Ahn, Seung-Yeal Ha, and Jeongho Kim. Nonrelativistic limits of the relativistic Cucker–Smale model and its kinetic counterpart. *Journal of Mathematical Physics*, 63(8):082701, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/082701/2846033/Nonrelativistic-limits-of-the-relativistic-Cucker-Smale-model>.

Baake:2022:FDP

- [1122] Michael Baake, Franz Gähler, and Jan Mazáč. Fibonacci direct product variation tilings. *Journal of Mathematical Physics*, 63(8):082702, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/082702/2846055/Fibonacci-direct-product-variation-tilings>.

Ge:2022:QPB

- [1123] Chuanfang Ge, Jiansheng Geng, and Yingfei Yi. Quasi-periodic breathers in Newton’s cradle. *Journal of Mathematical Physics*, 63(8):082703, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/082703/2846047/Quasi-periodic-breathers-in-Newton-s-cradle>.

Deng:2022:QHT

- [1124] Yanxia Deng, Slim Ibrahim, and Lingjun Qian. Quasi-homogeneous two-body problem. *Journal of Mathematical Physics*, 63(8):082901, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/082901/2846059/Quasi-homogeneous-two-body-problem>.

Krpensky:2022:NCA

- [1125] A. Krpensky, V. Hruska, and M. Bednarik. A new class of approximate analytical solutions of the Pridmore–Brown equation. *Journal of Mathematical Physics*, 63(8):083101, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/083101/2846021/A-new-class-of-approximate-analytical-solutions-of>.

Goldstein:2022:SSO

- [1126] S. Goldstein, J. L. Lebowitz, and E. R. Speer. Stationary states of the one-dimensional discrete-time facilitated symmetric exclusion process. *Journal of Mathematical Physics*, 63(8):083301, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/083301/2846043/Stationary-states-of-the-one-dimensional-discrete>. Special collection in honor of Freeman Dyson.

Wang:2022:SML

- [1127] Wei Wang, Guangying Lv, and Jinglong Wei. Small mass limit in mean field theory for stochastic N particle system. *Journal of Mathematical Physics*, 63(8):083302, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/083302/2846095/Small-mass-limit-in-mean-field-theory-for>.

Pirjol:2022:GRS

- [1128] Dan Pirjol. Growth rate of a stochastic growth process driven by an exponential Ornstein–Uhlenbeck process. *Journal of Mathematical Physics*, 63(8):083303, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/083303/2846101/Growth-rate-of-a-stochastic-growth-process-driven>.

Guler:2022:GQE

- [1129] Sinem Güler and Uday Chand De. Generalized quasi-Einstein metrics and applications on generalized Robertson–Walker spacetimes. *Journal of Mathematical Physics*, 63(8):083501, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/083501/2846096/Generalized-quasi-Einstein-metrics-and>.

Baradaran:2022:KNV

- [1130] Marzieh Baradaran and Pavel Exner. Kagome network with vertex coupling of a preferred orientation. *Journal of Mathematical Physics*, 63(8):083502, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/083502/2846107/Kagome-network-with-vertex-coupling-of-a-preferred>.

Wei:2022:FGS

- [1131] Jiao Wei, Xianguo Geng, Xin Wang, and Yunyun Zhai. Finite genus solutions of the generalized Merola–Ragnisco–Tu lattice hierarchy. *Journal of Mathematical Physics*, 63(8):083503, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/083503/2846103/Finite-genus-solutions-of-the-generalized-Merola>.

Naber:2022:BZF

- [1132] M. G. Naber, B. M. Bruck, and S. E. Costello. The Bessel zeta function. *Journal of Mathematical Physics*, 63(8):083504, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/083504/2846099/The-Bessel-zeta-function>.

Mead:2022:ENT

- [1133] Lawrence R. Mead, Sungwook Lee, and David Garfinkle. Erratum: A non-trivial PT-symmetric continuum Hamiltonian and its eigenstates and eigenvalues [J. Math. Phys. **63**, 072104 (2022)]. *Journal of Mathematical Physics*, 63(8):089901, August 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/8/089901/2846094/Erratum-A-non-trivial-PT-symmetric-continuum>. See [1076].

Chevyrev:2022:SQY

- [1134] Ilya Chevyrev. Stochastic quantization of Yang–Mills. *Journal of Mathematical Physics*, 63(9):091101, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091101/2844235/Stochastic-quantization-of-Yang-Mills>.

Christodoulou:2022:DSF

- [1135] Demetrios Christodoulou. On the development of shocks in fluids. *Journal of Mathematical Physics*, 63(9):091102, September

2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091102/2844195/On-the-development-of-shocks-in-fluids>.

Dai:2022:GWS

- [1136] Feng Dai and Bin Liu. Global weak solutions in a three-dimensional two-species cancer invasion haptotaxis model without cell proliferation. *Journal of Mathematical Physics*, 63(9):091501, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091501/2844210/Global-weak-solutions-in-a-three-dimensional-two>.

Ge:2022:DPP

- [1137] Bin Ge, Jin-Wei Zhao, and Wen-Shuo Yuan. On double-phase problems without any growth and Ambrosetti–Rabinowitz conditions. *Journal of Mathematical Physics*, 63(9):091502, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091502/2844217/On-double-phase-problems-without-any-growth-and>.

Mezadek:2022:CVP

- [1138] A. Kainane Mezadek and D. Rebah. A constrained variational problem for an existence theorem of steady vortex rings in Poiseuille flow. *Journal of Mathematical Physics*, 63(9):091503, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091503/2844207/A-constrained-variational-problem-for-an-existence>.

Han:2022:DPD

- [1139] Pigong Han, Keke Lei, Chenggang Liu, and Xuewen Wang. Decay properties for a density-dependent liquid crystal system. *Journal of Mathematical Physics*, 63(9):091504, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091504/2844240/Decay-properties-for-a-density-dependent-liquid>.

Shimizu:2022:LWP

- [1140] Ikkei Shimizu. Local well-posedness of the Landau–Lifshitz equation with helicity term. *Journal of Mathematical Physics*, 63(9):091505, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091505/2844231/Local-well-posedness-of-the-Landau-Lifshitz>.

Ma:2022:IBV

- [1141] Xuan Ma and Fuli He. The initial boundary value problem for the Vlasov–Poisson–Fokker–Planck system. *Journal of Mathematical Physics*, 63(9):091506, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091506/2844205/The-initial-boundary-value-problem-for-the-Vlasov>.

Jin:2022:SRS

- [1142] Hong Sung Jin, Minkyu Kwak, and Bataa Lkhagvasuren. Stability result for the surface quasi-geostrophic equations with horizontal dissipation in anisotropic Sobolev space. *Journal of Mathematical Physics*, 63(9):091507, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091507/2844201/Stability-result-for-the-surface-quasi-geostrophic>.

Ren:2022:GEQ

- [1143] Guoqiang Ren. Global existence of a quasilinear chemotaxis model with signal-dependent motility and indirect signal production mechanism. *Journal of Mathematical Physics*, 63(9):091508, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091508/2844228/Global-existence-of-a-quasilinear-chemotaxis-model>.

Li:2022:LEB

- [1144] Huicong Li and Jingyu Li. Lifespan of effective boundary conditions for the heat equation. *Journal of Mathematical Physics*, 63(9):091509, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091509/2844190/Lifespan-of-effective-boundary-conditions-for-the>.

Cui:2022:GSS

- [1145] Na Cui and Hong-Rui Sun. Ground state solution for a nonlinear fractional magnetic Schrödinger equation with indefinite potential. *Journal of Mathematical Physics*, 63(9):091510, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091510/2844197/Ground-state-solution-for-a-nonlinear-fractional>.

Tong:2022:GEA

- [1146] Leilei Tong and Yi Xia. Global existence and the algebraic decay rate of the solution for the quantum Navier–Stokes–Poisson equations in \mathbf{R}^3 . *Journal of Mathematical Physics*, 63(9):091511, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091511/2844203/Global-existence-and-the-algebraic-decay-rate-of>.

Gokhale:2022:WZA

- [1147] Soham Gokhale and Utpal Manna. Wong–Zakai approximations for the stochastic Landau–Lifshitz–Bloch equations. *Journal of Mathematical Physics*, 63(9):091512, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091512/2844206/Wong-Zakai-approximations-for-the-stochastic>.

Bagnoli:2022:CFI

- [1148] Lucia Bagnoli and Fabrizio Caselli. Classification of finite irreducible conformal modules for Kt_4 . *Journal of Mathematical Physics*, 63(9):091701, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091701/2844208/Classification-of-finite-irreducible-conformal>.

Skrypnyk:2022:AGC

- [1149] T. Skrypnyk. Anisotropic Z_n -graded classical r -matrix, deformed A_n Toda- and Gaudin-type models, and separation of variables. *Journal of Mathematical Physics*, 63(9):091702, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091702/2844214/Anisotropic-Zn-graded-classical-r-matrix-deformed>.

Das:2022:CDW

- [1150] Apurba Das. Cohomology and deformations of weighted Rota–Baxter operators. *Journal of Mathematical Physics*, 63(9):091703, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091703/2844224/Cohomology-and-deformations-of-weighted-Rota>.

Aizawa:2022:IRG

- [1151] N. Aizawa and S. Doi. Irreducible representations of Z_2^2 -graded $\mathcal{N} = 2$ supersymmetry algebra and Z_2^2 -graded supermechanics. *Journal of Math-*

ematical Physics, 63(9):091704, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091704/2844243/Irreducible-representations-of-Z22-graded-N-2>.

Verdon:2022:CST

- [1152] Dominic Verdon. A covariant Stinespring theorem. *Journal of Mathematical Physics*, 63(9):091705, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091705/2844177/A-covariant-Stinespring-theorem>.

Barron:2022:RGV

- [1153] Katrina Barron, Karina Batistelli, Florencia Orosz Hunziker, Veronika Pedić Tomić, and Gaywalee Yamskulna. On rationality of \mathbf{C} -graded vertex algebras and applications to Weyl vertex algebras under conformal flow. *Journal of Mathematical Physics*, 63(9):091706, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091706/2844308/On-rationality-of-C-graded-vertex-algebras-and>.

Friesecke:2022:TEW

- [1154] Gero Friesecke and Benedikt R. Graswald. Two-electron wavefunctions are matrix product states with bond dimension three. *Journal of Mathematical Physics*, 63(9):091901, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091901/2844337/Two-electron-wavefunctions-are-matrix-product>.

Ludewig:2022:LSG

- [1155] Matthias Ludewig and Guo Chuan Thiang. Large-scale geometry obstructs localization. *Journal of Mathematical Physics*, 63(9):091902, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/091902/2844302/Large-scale-geometry-obstructs-localization>.

Kapustin:2022:LNT

- [1156] Anton Kapustin and Nikita Sopenko. Local Noether theorem for quantum lattice systems and topological invariants of gapped states. *Journal of Mathematical Physics*, 63(9):091903, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/>

9/091903/2844344/Local-Noether-theorem-for-quantum-lattice-systems.

Anzaldo-Meneses:2022:SCO

- [1157] A. Anzaldo-Meneses. Supercanonical coordinates for orthosymplectic evolution operators. *Journal of Mathematical Physics*, 63(9):092101, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/092101/2844330/Supercanonical-coordinates-for-orthosymplectic>.

Matsuda:2022:CQG

- [1158] Junichiro Matsuda. Classification of quantum graphs on M_2 and their quantum automorphism groups. *Journal of Mathematical Physics*, 63(9):092201, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/092201/2844353/Classification-of-quantum-graphs-on-M2-and-their>.

Kye:2022:CMR

- [1159] Seung-Hyeok Kye. Choi matrices revisited. *Journal of Mathematical Physics*, 63(9):092202, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/092202/2844297/Choi-matrices-revisited>.

Vieira:2022:GUC

- [1160] Vandenberg Lopes Vieira and Orlando Stanley Juriaans. On geometrically uniform codes and topological quantum MDS codes. *Journal of Mathematical Physics*, 63(9):092203, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/092203/2844316/On-geometrically-uniform-codes-and-topological>.

Boche:2022:SSQ

- [1161] Holger Boche, Minglai Cai, Christian Deppe, Roberto Ferrara, and Moritz Wiese. Semantic security for quantum wiretap channels. *Journal of Mathematical Physics*, 63(9):092204, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/092204/2844303/Semantic-security-for-quantum-wiretap-channels>.

Dedushenko:2022:CWS

- [1162] Mykola Dedushenko and Davide Gaiotto. Correlators on the wall and $\mathfrak{f}\downarrow_n$ spin chain. *Journal of Mathematical Physics*, 63(9):092301, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/092301/2844342/Correlators-on-the-wall-and-sln-spin-chain>.

Iseppi:2022:GFB

- [1163] Roberta A. Iseppi. The ghost fields and the BV extension for finite spectral triples. *Journal of Mathematical Physics*, 63(9):092302, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/092302/2844294/The-ghost-fields-and-the-BV-extension-for-finite>.

Juarez-Aubry:2022:SGC

- [1164] Benito A. Juárez-Aubry and Sujoy K. Modak. Semiclassical gravity with a conformally covariant field in globally hyperbolic spacetimes. *Journal of Mathematical Physics*, 63(9):092303, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/092303/2844300/Semiclassical-gravity-with-a-conformally-covariant>.

Borji:2022:PRT

- [1165] Majdouline Borji and Christoph Kopper. Perturbative renormalization of φ_4^4 theory on the half space $\mathbf{R}^+ \times \mathbf{R}^3$ with flow equations. *Journal of Mathematical Physics*, 63(9):092304, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/092304/2844349/Perturbative-renormalization-of-44-theory-on-the>.

Bezdekova:2022:LPP

- [1166] Barbora Bezděková, Volker Perlick, and Jiří Bičák. Light propagation in a plasma on an axially symmetric and stationary spacetime: Separability of the Hamilton–Jacobi equation and shadow. *Journal of Mathematical Physics*, 63(9):092501, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/092501/2844306/Light-propagation-in-a-plasma-on-an-axially>.

Sato:2022:VES

- [1167] Naoki Sato and Michio Yamada. Vorticity equation on surfaces with arbitrary topology embedded in three-dimensional Euclidean space. *Journal of Mathematical Physics*, 63(9):093101, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/093101/2844313/Vorticity-equation-on-surfaces-with-arbitrary>.

Lacroix-A-Chez-Toine:2022:SRP

- [1168] Bertrand Lacroix-A-Chez-Toine, Yan V. Fyodorov, and Sirio Belga Fedeli. Superposition of random plane waves in high spatial dimensions: Random matrix approach to landscape complexity. *Journal of Mathematical Physics*, 63(9):093301, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/093301/2844320/Superposition-of-random-plane-waves-in-high>. Special collection in honor of Freeman Dyson.

Garban:2022:CSB

- [1169] Christophe Garban and Thomas Spencer. Continuous symmetry breaking along the Nishimori line. *Journal of Mathematical Physics*, 63(9):093302, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/093302/2844382/Continuous-symmetry-breaking-along-the-Nishimori>. Special collection in honor of Freeman Dyson.

Magnot:2022:ZSE

- [1170] Jean-Pierre Magnot, Enrique G. Reyes, and Vladimir Rubtsov. On (t_2, t_3) -Zakharov–Shabat equations of generalized Kadomtsev–Petviashvili hierarchies. *Journal of Mathematical Physics*, 63(9):093501, September 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/9/093501/2844379/On-t2-t3-Zakharov-Shabat-equations-of-generalized>.

Kang:2022:GSS

- [1171] Jin-Cai Kang, Xiao-Ping Chen, and Chun-Lei Tang. Ground state solutions for Schrödinger–Poisson system with critical growth and nonperiodic potential. *Journal of Mathematical Physics*, 63(10):101501, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/101501/2843127/Ground-state-solutions-for-Schrodinger-Poisson>.

Dong:2022:ASC

- [1172] Jianwei Dong and Jingjing Li. Analytical solutions to the compressible Euler equations with time-dependent damping and free boundaries. *Journal of Mathematical Physics*, 63(10):101502, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/101502/2843109/Analytical-solutions-to-the-compressible-Euler>.

Zhao:2022:GSS

- [1173] Yu-Xin Zhao, Xing-Ping Wu, and Chun-Lei Tang. Ground state sign-changing solutions for Schrödinger–Kirchhoff-type problem with critical growth. *Journal of Mathematical Physics*, 63(10):101503, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/101503/2843116/Ground-state-sign-changing-solutions-for>.

Ji:2022:ESC

- [1174] Un Cig Ji. Evolution systems and continuity equations for white noise functionals. *Journal of Mathematical Physics*, 63(10):101504, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/101504/2843158/Evolution-systems-and-continuity-equations-for>.

Ma:2022:SAB

- [1175] Liangliang Ma, Lin Li, and Dongbing Liu. Stability of the 2D anisotropic Boussinesq equations with mixed partial dissipation. *Journal of Mathematical Physics*, 63(10):101505, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/101505/2843132/Stability-of-the-2D-anisotropic-Boussinesq>.

Chen:2022:EVS

- [1176] Shouxin Chen and Guange Su. Existence of vortices for Schrödinger equations with logarithmic and saturable nonlinearity. *Journal of Mathematical Physics*, 63(10):101506, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/101506/2843101/Existence-of-vortices-for-Schrodinger-equations>.

Liu:2022:CMN

- [1177] Jiefeng Liu, Sihan Zhou, and Lamei Yuan. Conformal r -matrix-Nijenhuis structures, symplectic-Nijenhuis structures, and \mathcal{ON} -structures. *Journal*

of *Mathematical Physics*, 63(10):101701, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/101701/2843141/Conformal-r-matrix-Nijenhuis-structures-symplectic>.

Jones:2022:ISC

- [1178] Nick G. Jones and Noah Linden. Integrable spin chains and the Clifford group. *Journal of Mathematical Physics*, 63(10):101901, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/101901/2843173/Integrable-spin-chains-and-the-Clifford-group>

Srivastava:2022:ADE

- [1179] Atulit Srivastava and S. K. Soni. Algebraic derivation of the energy eigenvalues for the quantum oscillator defined on the sphere and the hyperbolic plane. *Journal of Mathematical Physics*, 63(10):102101, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/102101/2843163/Algebraic-derivation-of-the-energy-eigenvalues-for>.

Duboscq:2022:LQG

- [1180] Romain Duboscq and Olivier Pinaud. On local quantum Gibbs states. *Journal of Mathematical Physics*, 63(10):102102, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/102102/2843152/On-local-quantum-Gibbs-states>.

Zhou:2022:QEM

- [1181] Li Zhou, Nengkun Yu, Shenggang Ying, and Mingsheng Ying. Quantum earth mover’s distance, a no-go quantum Kantorovich–Rubinstein theorem, and quantum marginal problem. *Journal of Mathematical Physics*, 63(10):102201, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/102201/2843097/Quantum-earth-mover-s-distance-a-no-go-quantum>.

Collins:2022:CER

- [1182] Benoît Collins and Félix Parraud. Concentration estimates for random subspaces of a tensor product and application to quantum information theory. *Journal of Mathematical Physics*, 63(10):102202, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658

(electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/102202/2843106/Concentration-estimates-for-random-subspaces-of-a>.

Lorenzoni:2022:RNS

- [1183] Paolo Lorenzoni and Sara Perletti. Regular non-semisimple Dubrovin–Frobenius manifolds. *Journal of Mathematical Physics*, 63(10):102301, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/102301/2843112/Regular-non-semisimple-Dubrovin-Frobenius>.

Xu:2022:RRA

- [1184] Feng Xu. Rigorous results about entropies in quantum field theory. *Journal of Mathematical Physics*, 63(10):102302, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/102302/2843119/Rigorous-results-about-entropies-in-quantum-field>.

Ma:2022:LSA

- [1185] Zhichao Ma and Junxiang Xu. Lagrange stability for asymptotic linear Duffing equations. *Journal of Mathematical Physics*, 63(10):102701, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/102701/2843170/Lagrange-stability-for-asymptotic-linear-Duffing>.

Shu:2022:VSH

- [1186] Xiang Shu, Jun Yan, and Kai Zhao. Viscosity subsolutions of Hamilton–Jacobi equations and invariant sets of contact Hamilton systems. *Journal of Mathematical Physics*, 63(10):102702, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/102702/2843137/Viscosity-subsolutions-of-Hamilton-Jacobi>.

Abdallah:2022:DNA

- [1187] Ahmed Y. Abdallah, Heba N. Abu-Shaab, Taqwa M. Al-Khader, and Rania T. Wannan. Dynamics of non-autonomous first order lattice systems in weighted spaces. *Journal of Mathematical Physics*, 63(10):102703, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/102703/2843146/Dynamics-of-non-autonomous-first-order-lattice>.

He:2022:UAN

- [1188] Jinfang He, Shan Ma, Chunyou Sun, and Lu Yang. Uniform attractors for nonautonomous 2D MHD equations with partial dissipation. *Journal of Mathematical Physics*, 63(10):102704, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/102704/2843155/Uniform-attractors-for-nonautonomous-2D-MHD>.

Wood:2022:SPA

- [1189] William Wood. On the spectrum of the periodic Anderson–Bernoulli model. *Journal of Mathematical Physics*, 63(10):102705, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/102705/2843171/On-the-spectrum-of-the-periodic-Anderson-Bernoulli>.

Selvam:2022:RFD

- [1190] A. Panneer Selvam and V. Govindaraj. Reachability of fractional dynamical systems with multiple delays in control using ψ -Hilfer pseudo-fractional derivative. *Journal of Mathematical Physics*, 63(10):102706, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/102706/2843166/Reachability-of-fractional-dynamical-systems-with>.

Frassek:2022:ESI

- [1191] Rouven Frassek and Cristian Giardinà. Exact solution of an integrable non-equilibrium particle system. *Journal of Mathematical Physics*, 63(10):103301, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/103301/2843267/Exact-solution-of-an-integrable-non-equilibrium>.

Jia:2022:RSB

- [1192] Yiyang Jia, Dario Rosa, and Jacobus J. M. Verbaarschot. Replica symmetry breaking for the integrable two-site Sachdev–Ye–Kitaev model. *Journal of Mathematical Physics*, 63(10):103302, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/103302/2843256/Replica-symmetry-breaking-for-the-integrable-two>. Special collection in honor of Freeman Dyson.

Cipolloni:2022:DES

- [1193] Giorgio Cipolloni, László Erdős, Dominik Schröder, and Yuanyuan Xu. Directional extremal statistics for Ginibre eigenvalues. *Journal of Mathematical Physics*, 63(10):103303, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/103303/2843234/Directional-extremal-statistics-for-Ginibre>.

Agliari:2022:NPA

- [1194] Elena Agliari, Alberto Fachechi, and Chiara Marullo. Nonlinear PDEs approach to statistical mechanics of dense associative memories. *Journal of Mathematical Physics*, 63(10):103304, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/103304/2843264/Nonlinear-PDEs-approach-to-statistical-mechanics>.

Aktosun:2022:GMD

- [1195] Tuncay Aktosun and Mehmet Unlu. A generalized method for the Darboux transformation. *Journal of Mathematical Physics*, 63(10):103501, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/103501/2843241/A-generalized-method-for-the-Darboux>.

Miki:2022:CQW

- [1196] Hiroshi Miki, Satoshi Tsujimoto, and Luc Vinet. Classical and quantum walks on paths associated with exceptional Krawtchouk polynomials. *Journal of Mathematical Physics*, 63(10):103502, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/103502/2843247/Classical-and-quantum-walks-on-paths-associated>.

Xia:2022:PAI

- [1197] Li-Li Xia, Meng-Meng Wu, and Long Bai. Preservation of adiabatic invariants and geometric numerical algorithm for disturbed non-holonomic systems. *Journal of Mathematical Physics*, 63(10):103503, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/103503/2843259/Preservation-of-adiabatic-invariants-and-geometric>.

Adler:2022:NAT

- [1198] V. E. Adler and M. P. Kolesnikov. Non-Abelian Toda lattice and analogs of Painlevé III equation. *Journal of Mathematical Physics*, 63(10):

103504, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/103504/2843225/Non-Abelian-Toda-lattice-and-analogs-of-Painleve>.

Besnard:2022:PMS

- [1199] F. Besnard and S. Farnsworth. Particle models from special Jordan backgrounds and spectral triples. *Journal of Mathematical Physics*, 63(10):103505, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/103505/2843253/Particle-models-from-special-Jordan-backgrounds>.

Lee:2022:CMP

- [1200] Gihyun Lee and Max Lein. A calculus for magnetic pseudodifferential super operators. *Journal of Mathematical Physics*, 63(10):103506, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/103506/2843271/A-calculus-for-magnetic-pseudodifferential-super>.

Tataris:2022:DGL

- [1201] Andreas Tataris and Tristan van Leeuwen. A distributional Gelfand–Levitan–Marchenko equation for the Helmholtz scattering problem on the line. *Journal of Mathematical Physics*, 63(10):103507, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/103507/2843217/A-distributional-Gelfand-Levitan-Marchenko>.

Morato:2022:FTE

- [1202] Laura M. Morato. Free time evolution of the quantum wave function and optimal transportation. *Journal of Mathematical Physics*, 63(10):103508, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/103508/2843230/Free-time-evolution-of-the-quantum-wave-function>.

Keys:2022:EPS

- [1203] Dustin Keys and Jan Wehr. Erratum: “Poisson stochastic master equation unravelings and the measurement problem: a quantum stochastic calculus perspective” [J. Math. Phys. **61**, 032101 (2020)]. *Journal of Mathematical Physics*, 63(10):109901, October 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/10/109901/2843251/Erratum-Poisson-stochastic-master-equation>. See [83].

Yang:2022:PRW

- [1204] Jiaqi Yang. Partially regular weak solutions to the fractional Navier–Stokes equations with the critical dissipation. *Journal of Mathematical Physics*, 63(11):111501, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/111501/2846011/Partially-regular-weak-solutions-to-the-fractional>.

Read:2022:LSE

- [1205] Larry Read, Bogusław Zegarliniński, and Mengchun Zhang. Logarithmic Schrödinger equations in infinite dimensions. *Journal of Mathematical Physics*, 63(11):111502, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/111502/2846028/Logarithmic-Schrodinger-equations-in-infinite>.

Ju:2022:ZML

- [1206] Qiangchang Ju and Jianjun Xu. Zero-Mach limit of the compressible Navier–Stokes–Korteweg equations. *Journal of Mathematical Physics*, 63(11):111503, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/111503/2846068/Zero-Mach-limit-of-the-compressible-Navier-Stokes>.

Kim:2022:RII

- [1207] Jae-Myoung Kim. Regularity for 3D inhomogeneous incompressible MHD equations with vacuum. *Journal of Mathematical Physics*, 63(11):111504, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/111504/2846023/Regularity-for-3D-inhomogeneous-incompressible-MHD>.

Palmieri:2022:SWE

- [1208] Alessandro Palmieri and Hiroyuki Takamura. On a semilinear wave equation in anti-de Sitter spacetime: The critical case. *Journal of Mathematical Physics*, 63(11):111505, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/111505/2846062/On-a-semilinear-wave-equation-in-anti-de-Sitter>.

Li:2022:GWPb

- [1209] Huanyuan Li. Global well-posedness to the Cauchy problem of 2D non-homogeneous Bénard system with large initial data and vacuum. *Journal of Mathematical Physics*, 63(11):111506, November 2022. CODEN

JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/111506/2846007/Global-well-posedness-to-the-Cauchy-problem-of-2D>.

Wang:2022:EDR

- [1210] Shuai Wang, Fei Chen, Yongye Zhao, and Chuanbao Wang. Estimation of decay rates to large-solutions of 3D compressible magnetohydrodynamic system. *Journal of Mathematical Physics*, 63(11):111507, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/111507/2846017/Estimation-of-decay-rates-to-large-solutions-of-3D>.

Huang:2022:SGI

- [1211] Guangyue Huang and Mingfang Zhu. Some geometric inequalities on Riemannian manifolds associated with the generalized modified Ricci curvature. *Journal of Mathematical Physics*, 63(11):111508, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/111508/2846053/Some-geometric-inequalities-on-Riemannian>.

Rottensteiner:2022:HAO

- [1212] David Rottensteiner and Michael Ruzhansky. Harmonic and anharmonic oscillators on the Heisenberg group. *Journal of Mathematical Physics*, 63(11):111509, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/111509/2846056/Harmonic-and-anharmonic-oscillators-on-the>.

Liu:2022:ASS

- [1213] Anran Liu and Engui Fan. The asymptotic stability of solitons for the focusing mKdV equation with weak weighted Sobolev initial data. *Journal of Mathematical Physics*, 63(11):111510, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/111510/2846048/The-asymptotic-stability-of-solitons-for-the>.

Dlotko:2022:NSC

- [1214] Tomasz Dlotko. Navier–Stokes–Cahn–Hilliard system of equations. *Journal of Mathematical Physics*, 63(11):111511, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/111511/2846003/Navier-Stokes-Cahn-Hilliard-system-of-equations>.

Yang:2022:DSR

- [1215] Shuang Yang, Yangrong Li, and Tomás Caraballo. Dynamical stability of random delayed FitzHugh–Nagumo lattice systems driven by nonlinear Wong–Zakai noise. *Journal of Mathematical Physics*, 63(11):111512, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/111512/2846009/Dynamical-stability-of-random-delayed-FitzHugh>.

Liu:2022:EMB

- [1216] Weiming Liu. Existence of multi-bump solutions for a nonlinear Kirchhoff-type system. *Journal of Mathematical Physics*, 63(11):111513, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/111513/2846015/Existence-of-multi-bump-solutions-for-a-nonlinear>.

Shapiro:2022:CSM

- [1217] Jacob Shapiro and Michael I. Weinstein. Is the continuum SSH model topological? *Journal of Mathematical Physics*, 63(11):111901, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/111901/2846020/Is-the-continuum-SSH-model-topological>.

Curtright:2022:PVG

- [1218] T. Curtright and S. Subedi. Potentials vs geometry, revisited. *Journal of Mathematical Physics*, 63(11):112101, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112101/2846025/Potentials-vs-geometry-revisited>.

Heimendahl:2022:AOA

- [1219] Arne Heimendahl, Markus Heinrich, and David Gross. The axiomatic and the operational approaches to resource theories of magic do not coincide. *Journal of Mathematical Physics*, 63(11):112201, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112201/2846042/The-axiomatic-and-the-operational-approaches-to>.

vomEnde:2022:WBH

- [1220] Frederik vom Ende. Which bath Hamiltonians matter for thermal operations? *Journal of Mathematical Physics*, 63(11):112202, November 2022.

ber 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112202/2846069/Which-bath-Hamiltonians-matter-for-thermal>.

Shirokov:2022:OFK

- [1221] M. E. Shirokov. Optimal form of the Kretschmann–Schlingemann–Werner theorem for energy-constrained quantum channels and operations. *Journal of Mathematical Physics*, 63(11):112203, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112203/2846038/Optimal-form-of-the-Kretschmann-Schlingemann>.

Brannan:2022:QCG

- [1222] Michael Brannan, Priyanga Ganesan, and Samuel J. Harris. The quantum-to-classical graph homomorphism game. *Journal of Mathematical Physics*, 63(11):112204, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112204/2846145/The-quantum-to-classical-graph-homomorphism-game>.

Appleby:2022:SPS

- [1223] Marcus Appleby, Ingemar Bengtsson, Markus Grassl, Michael Harrison, and Gary McConnell. SIC-POVMs from Stark units: Prime dimensions $n^2 + 3$. *Journal of Mathematical Physics*, 63(11):112205, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112205/2846122/SIC-POVMs-from-Stark-units-Prime-dimensions-n2-3>.

Burgarth:2022:SCD

- [1224] Daniel Burgarth, Paolo Facchi, and Robin Hillier. Stability and convergence of dynamical decoupling with finite amplitude controls. *Journal of Mathematical Physics*, 63(11):112206, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112206/2846127/Stability-and-convergence-of-dynamical-decoupling>.

Hohn:2022:IQR

- [1225] Philipp A. Höhn, Marius Krumm, and Markus P. Müller. Internal quantum reference frames for finite Abelian groups. *Journal of Mathematical Physics*, 63(11):112207, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112207/2846139/Internal-quantum-reference-frames-for-finite>.

Kiessling:2022:DDS

- [1226] Michael K.-H. Kiessling, Eric Ling, and A. Shadi Tahvildar-Zadeh. On the discrete Dirac spectrum of a point electron in the zero-gravity Kerr–Newman spacetime. *Journal of Mathematical Physics*, 63(11):112301, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112301/2846150/On-the-discrete-Dirac-spectrum-of-a-point-electron>. See publisher’s note [1293].

Boucetta:2022:KTD

- [1227] Mohamed Boucetta, Aissa Meliani, and Abdelghani Zeghib. Kundt three-dimensional left invariant spacetimes. *Journal of Mathematical Physics*, 63(11):112501, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112501/2846105/Kundt-three-dimensional-left-invariant-spacetimes>.

Panah:2022:TDL

- [1228] B. Eslam Panah. Two-dimensional Lifshitz-like AdS black holes in $F(r)$ gravity. *Journal of Mathematical Physics*, 63(11):112502, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112502/2846116/Two-dimensional-Lifshitz-like-AdS-black-holes-in-F>.

Chen:2022:GCM

- [1229] Yu-Jie Chen, Shi-Lin Li, Yu-Zhu Chen, Wen-Du Li, and Wu-Sheng Dai. Gravitational constant model and correction. *Journal of Mathematical Physics*, 63(11):112503, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112503/2846098/Gravitational-constant-model-and-correction>.

Chen:2022:LQV

- [1230] Dan Chen, Michal Fečkan, and JinRong Wang. Linear quaternion-valued difference equations: Representation of solutions, controllability, and observability. *Journal of Mathematical Physics*, 63(11):112701, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112701/2846147/Linear-quaternion-valued-difference-equations>.

Chen:2022:ISA

- [1231] Shuang Chen and Jinqiao Duan. Instability of small-amplitude periodic waves from fold-Hopf bifurcation. *Journal of Mathematical Physics*, 63(11):112702, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112702/2846112/Instability-of-small-amplitude-periodic-waves-from>.

Littlejohn:2022:CPM

- [1232] Robert Littlejohn, Philip Morrison, and Jeffrey Heninger. Charged particle motion in spherically symmetric distributions of magnetic monopoles. *Journal of Mathematical Physics*, 63(11):112703, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112703/2846136/Charged-particle-motion-in-spherically-symmetric>.

Saba:2022:GJG

- [1233] N. Saba and A. Boussayoud. Gaussian (p, q) -Jacobsthal and Gaussian (p, q) -Jacobsthal Lucas numbers and their some interesting properties. *Journal of Mathematical Physics*, 63(11):112704, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112704/2846102/Gaussian-p-q-Jacobsthal-and-Gaussian-p-q>.

Si:2022:DRT

- [1234] Wen Si and Xinyu Guan. Degenerate response tori in Hamiltonian systems with higher zero-average perturbation. *Journal of Mathematical Physics*, 63(11):112705, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112705/2846109/Degenerate-response-tori-in-Hamiltonian-systems>.

Pina:2022:PCC

- [1235] E. Piña. Planar central configurations with five different positive masses. *Journal of Mathematical Physics*, 63(11):112901, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/112901/2846115/Planar-central-configurations-with-five-different>.

Hutchcroft:2022:SHU

- [1236] Tom Hutchcroft. Sharp hierarchical upper bounds on the critical two-point function for long-range percolation on \mathbf{Z}^d . *Journal of Mathematical*

Physics, 63(11):113301, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/113301/2846118/Sharp-hierarchical-upper-bounds-on-the-critical>.

Wang:2022:UMQ

- [1237] Ce Wang. The uniform measure for quantum walk on hypercube: a quantum Bernoulli noises approach. *Journal of Mathematical Physics*, 63(11):113501, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/113501/2846125/The-uniform-measure-for-quantum-walk-on-hypercube>.

Palheta:2022:CRM

- [1238] Pedro H. S. Palheta, Marcelo R. Barbosa, and Marcel Novaes. Commutators of random matrices from the unitary and orthogonal groups. *Journal of Mathematical Physics*, 63(11):113502, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/113502/2846130/Commutators-of-random-matrices-from-the-unitary>.

Yang:2022:MUC

- [1239] Qianqian Yang and Chuanzhong Li. Multiparameter universal characters of B -type and integrable hierarchy. *Journal of Mathematical Physics*, 63(11):113503, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/113503/2846182/Multiparameter-universal-characters-of-B-type-and>.

Zhu:2022:LTA

- [1240] Jin-Yan Zhu and Yong Chen. Long-time asymptotic behavior of the coupled dispersive AB system in low regularity spaces. *Journal of Mathematical Physics*, 63(11):113504, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/113504/2846187/Long-time-asymptotic-behavior-of-the-coupled>.

Nakata:2022:IDD

- [1241] Kenta Nakata. Integrable delay-difference and delay-differential analogs of the KdV, Boussinesq, and KP equations. *Journal of Mathematical Physics*, 63(11):113505, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/113505/2846180/Integrable-delay-difference-and-delay-differential>.

Alpay:2022:AGR

- [1242] Daniel Alpay, Fabrizio Colombo, Kamal Diki, and Irene Sabadini. An approach to the Gaussian RBF kernels via Fock spaces. *Journal of Mathematical Physics*, 63(11):113506, November 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/11/113506/2846177/An-approach-to-the-Gaussian-RBF-kernels-via-Fock>.

Henheik:2022:ATE

- [1243] Joscha Henheik and Tom Wessel. On adiabatic theory for extended fermionic lattice systems. *Journal of Mathematical Physics*, 63(12):121101, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/121101/2846084/On-adiabatic-theory-for-extended-fermionic-lattice>.

Deng:2022:CSH

- [1244] Shengbing Deng and Junwei Yu. On a class of singular Hamiltonian Choquard-type elliptic systems with critical exponential growth. *Journal of Mathematical Physics*, 63(12):121501, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/121501/2846061/On-a-class-of-singular-Hamiltonian-Choquard-type>.

Liu:2022:TPD

- [1245] Jianli Liu and Kenan Zhang. Threshold phenomenon in n -dimensional repulsive restricted Euler–Poisson equations with time-dependent damping. *Journal of Mathematical Physics*, 63(12):121502, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/121502/2846041/Threshold-phenomenon-in-n-dimensional-repulsive>.

Gao:2022:SPC

- [1246] Yu Gao, Hao Liu, and Tak Kwong Wong. Stability of peakons of the Camassa–Holm equation beyond wave breaking. *Journal of Mathematical Physics*, 63(12):121503, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/121503/2846080/Stability-of-peakons-of-the-Camassa-Holm-equation>.

Yang:2022:QAT

- [1247] Shaojie Yang and Zhijun Qiao. Qualitative analysis for a two-component peakon system with cubic nonlinearity. *Journal of Mathematical Physics*, 63(12):121504, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/121504/2846089/Qualitative-analysis-for-a-two-component-peakon>.

Priyanka:2022:DSV

- [1248] Priyanka and M. Zafar. Delta shocks and vacuum states in the Riemann solutions of Chaplygin Euler equations as pressure and magnetic field drop to zero. *Journal of Mathematical Physics*, 63(12):121505, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/121505/2846091/Delta-shocks-and-vacuum-states-in-the-Riemann>.

Safronov:2022:EPS

- [1249] Oleg Safronov. Eigenvalues of a periodic Schrödinger operator perturbed by a fast decaying potential. *Journal of Mathematical Physics*, 63(12):121506, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/121506/2846050/Eigenvalues-of-a-periodic-Schrodinger-operator>.

Li:2022:EDO

- [1250] Yuqiao Li. Eigenvalues of the Dirac operator on compact spin manifolds under Ricci flow. *Journal of Mathematical Physics*, 63(12):121507, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/121507/2846074/Eigenvalues-of-the-Dirac-operator-on-compact-spin>.

Freitas:2022:LTD

- [1251] M. M. Freitas, R. Q. Caljaro, A. J. A. Ramos, and H. C. M. Rodrigues. Long-time dynamics of ternary mixtures with localized dissipation. *Journal of Mathematical Physics*, 63(12):121508, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/121508/2846066/Long-time-dynamics-of-ternary-mixtures-with>.

Li:2022:RSA

- [1252] Shiwei Li. Riemann solutions of the anti-Chaplygin pressure Aw–Rascle model with friction. *Journal of Mathematical Physics*, 63(12):121509, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/121509/2846093/Riemann-solutions-of-the-anti-Chaplygin-pressure>.

Samproгна:2022:STA

- [1253] Rodrigo A. Samproгна and Leonardo Pires. Semicontinuity of trajectory attractors with respect to exponents for p -Laplacian equation. *Journal of Mathematical Physics*, 63(12):121510, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/121510/2846037/Semicontinuity-of-trajectory-attractors-with->

Fang:2022:SSC

- [1254] Li Fang, Yugang Zhao, and Zhenhua Guo. Stationary solutions to a compressible non-Newtonian fluid with general boundary conditions. *Journal of Mathematical Physics*, 63(12):121511, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/121511/2846045/Stationary-solutions-to-a-compressible-non->

Kim:2022:SBR

- [1255] Jeong-Ah Kim and Dong-Uy Shin. Strip bundle realization of the crystals over $U_q(D_4^{(3)})$. *Journal of Mathematical Physics*, 63(12):121701, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/121701/2846057/Strip-bundle-realization-of-the-crystals-over-Uq>.

Roy:2022:SDP

- [1256] Sumit Roy. Spectral data for parabolic projective symplectic/orthogonal Higgs bundles. *Journal of Mathematical Physics*, 63(12):121702, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/121702/2846063/Spectral-data-for-parabolic-projective-symplectic->

Marquette:2022:GQC

- [1257] Ian Marquette, Luke Yates, and Peter D. Jarvis. Generalized quadratic commutator algebras of PBW-type. *Journal of Mathematical Physics*, 63(12):121703, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/121703/2846070/Generalized-quadratic-commutator-algebras-of-PBW>.

Jezequel:2022:EBE

- [1258] Lucien Jezequel, Clément Tauber, and Pierre Delplace. Estimating bulk and edge topological indices in finite open chiral chains. *Journal of Mathematical Physics*, 63(12):121901, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/121901/2846078/Estimating-bulk-and-edge-topological-indices-in>.

Urban:2022:DFA

- [1259] Roman Urban. On a diffusion on finite adeles and the Feynman-Kac integral. *Journal of Mathematical Physics*, 63(12):122101, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/122101/2846082/On-a-diffusion-on-finite-adeles-and-the-Feynman-Kac-integral>.

Bagchi:2022:AHR

- [1260] Bijan Bagchi and Sauvik Sen. Artificial Hawking radiation, weak pseudo-Hermiticity, and Weyl semimetal blackhole analogy. *Journal of Mathematical Physics*, 63(12):122102, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/122102/2846087/Artificial-Hawking-radiation-weak-pseudo-Hermiticity-and-Weyl-semimetal-blackhole-analogy>.

Anshu:2022:CCN

- [1261] Anurag Anshu and Nikolas P. Breuckmann. A construction of combinatorial NLTS. *Journal of Mathematical Physics*, 63(12):122201, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/122201/2846035/A-construction-of-combinatorial-NLTS>.

Hu:2022:UPO

- [1262] Mengyao Hu, Lin Chen, Fei Shi, Xiande Zhang, and Jordi Tura. Unextendible product operator basis. *Journal of Mathematical Physics*,

63(12):122202, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/122202/2846086/Unextendible-product-operator-basis>.

LaRacuate:2022:QFM

- [1263] Nicholas LaRacuate. Quasi-factorization and multiplicative comparison of subalgebra-relative entropy. *Journal of Mathematical Physics*, 63(12):122203, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/122203/2846170/Quasi-factorization-and-multiplicative-comparison>.

Junge:2022:MTI

- [1264] Marius Junge and Nicholas LaRacuate. Multivariate trace inequalities, p -fidelity, and universal recovery beyond tracial settings. *Journal of Mathematical Physics*, 63(12):122204, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/122204/2846146/Multivariate-trace-inequalities-p-fidelity-and>.

Higuchi:2022:SFA

- [1265] Atsushi Higuchi, Lasse Schmieding, and David Serrano Blanco. Scalar field in AdS_2 and representations of $\tilde{SL}(2, \mathbf{R})$. *Journal of Mathematical Physics*, 63(12):122301, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/122301/2846160/Scalar-field-in-AdS2-and-representations-of-SL-2-R>.

Henheik:2022:IBC

- [1266] Joscha Henheik and Roderich Tumulka. Interior-boundary conditions for the Dirac equation at point sources in three dimensions. *Journal of Mathematical Physics*, 63(12):122302, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/122302/2846135/Interior-boundary-conditions-for-the-Dirac>.

Galloway:2022:CNC

- [1267] Gregory J. Galloway and Eric Ling. The codimension 2 null cut locus with applications to spacetime topology. *Journal of Mathematical Physics*, 63(12):122501, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/122501/2846129/The-codimension-2-null-cut-locus-with-applications>.

Chai:2022:MAH

- [1268] Xiaoxiang Chai and Xueyuan Wan. The mass of an asymptotically hyperbolic end and distance estimates. *Journal of Mathematical Physics*, 63(12):122502, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/122502/2846153/The-mass-of-an-asymptotically-hyperbolic-end-and>.

Wu:2022:PWP

- [1269] Weixin Wu and Zhidong Teng. Periodic wave propagation in a diffusive SIR epidemic model with nonlinear incidence and periodic environment. *Journal of Mathematical Physics*, 63(12):122701, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/122701/2846167/Periodic-wave-propagation-in-a-diffusive-SIR>.

Lin:2022:PMI

- [1270] Yusen Lin, Yayu Li, and Dingshi Li. Periodic measures of impulsive stochastic neural networks lattice systems with delays. *Journal of Mathematical Physics*, 63(12):122702, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/122702/2846141/Periodic-measures-of-impulsive-stochastic-neural>.

Corbera:2022:PCC

- [1271] M. Corbera, J. Llibre, and C. Valls. Planar central configurations of some restricted $(4 + 1)$ -body problems. *Journal of Mathematical Physics*, 63(12):122901, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/122901/2846165/Planar-central-configurations-of-some-restricted-4>.

Esen:2022:RGSa

- [1272] Oğul Esen, Miroslav Grmela, and Michal Pavelka. On the role of geometry in statistical mechanics and thermodynamics. I. Geometric perspective. *Journal of Mathematical Physics*, 63(12):122902, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/122902/2846172/On-the-role-of-geometry-in-statistical-mechanics>.■

Khare:2022:NSK

- [1273] Avinash Khare and Avadh Saxena. Novel superposed kinklike and pulse-like solutions for several nonlocal nonlinear equations. *Journal of Math-*

Journal of Mathematical Physics, 63(12):122903, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/122903/2846126/Novel-superposed-kinklike-and-pulselike-solutions>.

Liu:2022:LTT

- [1274] Pan Liu. Liouville-type theorems for the stationary compressible barotropic and incompressible inhomogeneous Navier–Stokes equations. *Journal of Mathematical Physics*, 63(12):123101, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123101/2846131/Liouville-type-theorems-for-the-stationary>.

Liu:2022:GES

- [1275] Cunming Liu. Global existence of smooth solutions to a full Euler–Poisson system in one space dimension. *Journal of Mathematical Physics*, 63(12):123102, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123102/2846140/Global-existence-of-smooth-solutions-to-a-full>.

Butta:2022:VVL

- [1276] Paolo Buttà, Guido Cavallaro, and Carlo Marchioro. Vanishing viscosity limit for concentrated vortex rings. *Journal of Mathematical Physics*, 63(12):123103, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123103/2846144/Vanishing-viscosity-limit-for-concentrated-vortex>.

Wang:2022:DHK

- [1277] Na Wang. (β -deformed) Hurwitz–Kontsevich model and affine Yangian of $\mathfrak{sl}(1)$. *Journal of Mathematical Physics*, 63(12):123301, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123301/2846149/deformed-Hurwitz-Kontsevich-model-and-affine>.

Weiss:2022:TLI

- [1278] Daniel Alexander Weiss. The thermodynamic limit of an ideal Bose gas by asymptotic expansions and spectral ζ -functions. *Journal of Mathematical Physics*, 63(12):123302, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123302/2846156/The-thermodynamic-limit-of-an-ideal-Bose-gas-by>.

Bet:2022:MDP

- [1279] Gianmarco Bet, Anna Gallo, and Francesca R. Nardi. Metastability for the degenerate Potts model with negative external magnetic field under Glauber dynamics. *Journal of Mathematical Physics*, 63(12):123303, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123303/2846162/Metastability-for-the-degenerate-Potts-model-with>. See erratum [1337].

Qian:2022:MDL

- [1280] Hongjiang Qian and George Yin. Moderate deviations for the Langevin equations: Strong damping and fast Markovian switching. *Journal of Mathematical Physics*, 63(12):123304, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123304/2846222/Moderate-deviations-for-the-Langevin-equations>.

Esen:2022:RGSb

- [1281] Oğul Esen, Miroslav Grmela, and Michal Pavelka. On the role of geometry in statistical mechanics and thermodynamics. II. Thermodynamic perspective. *Journal of Mathematical Physics*, 63(12):123305, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123305/2846208/On-the-role-of-geometry-in-statistical-mechanics>.

Donati:2022:RGR

- [1282] Luca Donati, Marcus Weber, and Bettina G. Keller. A review of Girsanov reweighting and of square root approximation for building molecular Markov state models. *Journal of Mathematical Physics*, 63(12):123306, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123306/2846228/A-review-of-Girsanov-reweighting-and-of-square>.

Wang:2022:LTA

- [1283] Deng-Shan Wang and Xiaodong Zhu. Long-time asymptotics of the good Boussinesq equation with q_{xx} -term and its modified version. *Journal of Mathematical Physics*, 63(12):123501, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123501/2846230/Long-time-asymptotics-of-the-good-Boussinesq>.

Hanisch:2022:FIL

- [1284] Florian Hanisch and Matthias Ludewig. The fermionic integral on loop space and the Pfaffian line bundle. *Journal of Mathematical Physics*, 63(12):123502, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123502/2846225/The-fermionic-integral-on-loop-space-and-the>.

Ohmori:2022:RHS

- [1285] S. Ohmori and J. Takahashi. Rigged Hilbert space approach for non-Hermitian systems with positive definite metric. *Journal of Mathematical Physics*, 63(12):123503, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123503/2846218/Rigged-Hilbert-space-approach-for-non-Hermitian>.

Shiozawa:2022:LBG

- [1286] Yuichi Shiozawa. Limiting behaviors of generalized elephant random walks. *Journal of Mathematical Physics*, 63(12):123504, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123504/2846202/Limiting-behaviors-of-generalized-elephant-random>.

Erman:2022:ROP

- [1287] Fatih Erman, Sema Seymen, and O. Teoman Turgut. Rank one perturbations supported by hybrid geometries and their deformations. *Journal of Mathematical Physics*, 63(12):123505, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123505/2846231/Rank-one-perturbations-supported-by-hybrid>.

DAchille:2022:DOT

- [1288] Matteo D’Achille, Aernout C. D. van Enter, and Arnaud Le Ny. Decimations for one- and two-dimensional Ising and rotator models. II. Continuous vs discrete symmetries. *Journal of Mathematical Physics*, 63(12):123506, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123506/2846226/Decimations-for-one-and-two-dimensional-Ising-and>.

Novikova:2022:CSD

- [1289] E. M. Novikova. Coherent Schwartz distributions of the Heisenberg algebra and inverted oscillator. *Journal of Mathematical*

Physics, 63(12):123507, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123507/2846224/Coherent-Schwartz-distributions-of-the-Heisenberg>.

Meljanac:2022:SOW

- [1290] Stjepan Meljanac, Zoran Škoda, and Saša Krešić-Jurić. Symmetric ordering and Weyl realizations for quantum Minkowski spaces. *Journal of Mathematical Physics*, 63(12):123508, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123508/2846195/Symmetric-ordering-and-Weyl-realizations-for>.

Fring:2022:LRI

- [1291] Andreas Fring and Rebecca Tenney. Lewis–Riesenfeld invariants for PT-symmetrically coupled oscillators from two-dimensional point transformations and Lie algebraic expansions. *Journal of Mathematical Physics*, 63(12):123509, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123509/2846206/Lewis-Riesenfeld-invariants-for-PT-symmetrically>.

Nucci:2022:MSS

- [1292] M. C. Nucci and R. Campoamor-Stursberg. Minimally superintegrable systems in flat three-dimensional space are also linearizable. *Journal of Mathematical Physics*, 63(12):123510, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/123510/2846216/Minimally-superintegrable-systems-in-flat-three>.

Kiessling:2022:PND

- [1293] Michael K.-H. Kiessling, Eric Ling, and A. Shadi Tahvildar-Zadeh. Publisher’s note: “On the discrete Dirac spectrum of a point electron in the zero-gravity Kerr–Newman spacetime” [J. Math. Phys. **63**, 112301 (2022)]. *Journal of Mathematical Physics*, 63(12):129901, December 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/63/12/129901/2846221/Publisher-s-Note-On-the-discrete-Dirac-spectrum-of>. See [1226].

Yamazaki:2023:QYC

- [1294] Masahito Yamazaki. Quiver Yangians and crystal meltings: a concise summary. *Journal of Mathematical Physics*, 64(1):011101, Jan-

uary 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011101/2870501/Quiver-Yangians-and-crystal-meltings-A-concise>.

Sun:2023:FVQ

- [1295] Wenlong Sun, Yeping Li, and Xiaoying Han. The full viscous quantum hydrodynamic system in one dimensional space. *Journal of Mathematical Physics*, 64(1):011501, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011501/2870486/The-full-viscous-quantum-hydrodynamic-system-in>.

Zheng:2023:BSC

- [1296] Bowen Zheng, Tohru Ozawa, and Jian Zhai. Blow-up solutions for a class of divergence Schrödinger equations with intercritical inhomogeneous nonlinearity. *Journal of Mathematical Physics*, 64(1):011502, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011502/2870450/Blow-up-solutions-for-a-class-of-divergence>.

Dong:2023:ASM

- [1297] Lihua Dong and Xiaoxia Ren. Asymptotic stability of the 2D MHD equations without magnetic diffusion. *Journal of Mathematical Physics*, 64(1):011503, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011503/2870493/Asymptotic-stability-of-the-2D-MHD-equations>.

Chen:2023:ASM

- [1298] Dongxiang Chen, Xiaoli Li, and Xiaoli Chen. Asymptotic stability of the 2D MHD equations without resistivity on a flat strip domain. *Journal of Mathematical Physics*, 64(1):011504, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011504/2870489/Asymptotic-stability-of-the-2D-MHD-equations>.

Chen:2023:GEW

- [1299] Yajie Chen, Yingting Miao, and Shijie Shi. Global existence and wave breaking for a stochastic two-component Camassa–Holm system. *Journal of Mathematical Physics*, 64(1):011505, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011505/2870479/Global-existence-and-wave-breaking-for-a>.

An:2023:CPL

- [1300] Xiaoming An and Xian Yang. Convergence from power-law to logarithm-law in nonlinear fractional Schrödinger equations. *Journal of Mathematical Physics*, 64(1):011506, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011506/2870446/Convergence-from-power-law-to-logarithm-law-in>.

Lee:2023:SSE

- [1301] Ho Lee, Jiho Lee, and Ernesto Nungesser. Small solutions of the Einstein–Boltzmann-scalar field system with Bianchi symmetry. *Journal of Mathematical Physics*, 64(1):011507, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011507/2870473/Small-solutions-of-the-Einstein-Boltzmann-scalar>.

Wang:2023:FDS

- [1302] Yixuan Wang and Meina Sun. Formation of delta shock and vacuum state for the pressureless hydrodynamic model under the small disturbance of traffic pressure. *Journal of Mathematical Physics*, 64(1):011508, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011508/2870497/Formation-of-delta-shock-and-vacuum-state-for-the>.

Zhang:2023:QPS

- [1303] Min Zhang, Yi Wang, and Jie Rui. Quasi-periodic solutions for one dimensional Schrödinger equation with quasi-periodic forcing and Dirichlet boundary condition. *Journal of Mathematical Physics*, 64(1):011509, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011509/2870461/Quasi-periodic-solutions-for-one-dimensional>.

Saanouni:2023:CIC

- [1304] Tarek Saanouni and Radhia Ghanmi. Critical inhomogeneous coupled Schrödinger equations. *Journal of Mathematical Physics*, 64(1):011510, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011510/2870444/Critical-inhomogeneous-coupled-Schrodinger>.

Li:2023:NKT

- [1305] Siran Li and Marshall Slemrod. From the Nash–Kuiper theorem of isometric embeddings to the Euler equations for steady

fluid motions: Analogues, examples, and extensions. *Journal of Mathematical Physics*, 64(1):011511, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011511/2870447/From-the-Nash-Kuiper-theorem-of-isometric>.

Bahrouni:2023:PIF

- [1306] Sabri Bahrouni, Hichem Ounaies, and Olfa Elfalah. Problems involving the fractional g -Laplacian with lack of compactness. *Journal of Mathematical Physics*, 64(1):011512, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011512/2870456/Problems-involving-the-fractional-g-Laplacian-with>.

Liu:2023:AEW

- [1307] Bingchen Liu, Ke Li, and Fengjie Li. Asymptotic estimate of weak solutions in a fourth-order parabolic equation with logarithm. *Journal of Mathematical Physics*, 64(1):011513, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011513/2870504/Asymptotic-estimate-of-weak-solutions-in-a-fourth>.

Yuan:2023:ETG

- [1308] Yiyin Yuan, Shuai Tian, Jun Qing, and Shihui Zhu. Exact thresholds for global existence to the nonlinear beam equations with and without a damping. *Journal of Mathematical Physics*, 64(1):011514, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011514/2870466/Exact-thresholds-for-global-existence-to-the>.

daVeiga:2023:FDD

- [1309] Hugo Beirão da Veiga and Jiaqi Yang. Fully developed, doubly periodic, viscous flows in infinite space-periodic pipes under general time-periodic total fluxes. *Journal of Mathematical Physics*, 64(1):011515, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011515/2870440/Fully-developed-doubly-periodic-viscous-flows-in>.

Zhang:2023:GWP

- [1310] Jingjing Zhang and Ting Zhang. Global well-posedness of perturbed Navier–Stokes system around Landau solutions. *Journal of Mathematical Physics*, 64(1):011516, January 2023. CODEN JMAPAQ. ISSN 0022-

2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011516/2870454/Global-well-posedness-of-perturbed-Navier-Stokes>.

Braden:2023:CES

- [1311] H. W. Braden, Sergey A. Cherkis, and Jason M. Quinones. Construction of exact solutions to Nahm's equations for the multi-monopole. *Journal of Mathematical Physics*, 64(1):011701, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011701/2870582/Construction-of-exact-solutions-to-Nahm-s>.

Garbali:2023:CMQ

- [1312] Alexandr Garbali and Andrei Neguț. Computing the r -matrix of the quantum toroidal algebra. *Journal of Mathematical Physics*, 64(1):011702, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011702/2870589/Computing-the-R-matrix-of-the-quantum-toroidal>.

Lee:2023:DRC

- [1313] Gahng Sahn Lee, Arim Song, and Uhi Rinn Suh. Dirac reductions and classical W -algebras. *Journal of Mathematical Physics*, 64(1):011703, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011703/2870613/Dirac-reductions-and-classical-W-algebras>.

Gubarev:2023:CYB

- [1314] Vsevolod Gubarev and Roman Kozlov. Conformal Yang-Baxter equation on $\text{Cur}(\mathfrak{sl}_2(\mathbb{C}))$. *Journal of Mathematical Physics*, 64(1):011704, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011704/2870604/Conformal-Yang-Baxter-equation-on-Cur-sl2-C>.

Falconi:2023:DMS

- [1315] Marco Falconi and Nikolai Leopold. Derivation of the Maxwell-Schrödinger equations: a note on the infrared sector of the radiation field. *Journal of Mathematical Physics*, 64(1):011901, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011901/2870572/Derivation-of-the-Maxwell-Schrodinger-equations-A>.

Monaco:2023:TVL

- [1316] Domenico Monaco and Thaddeus Roussigné. Topology vs localization in synthetic dimensions. *Journal of Mathematical Physics*, 64(1):011902, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011902/2870597/Topology-vs-localization-in-synthetic-dimensions>.

Mayer:2023:NLO

- [1317] L. P. Mayer. Non-local order parameters for fermion chains via the partial transpose. *Journal of Mathematical Physics*, 64(1):011903, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/011903/2870617/Non-local-order-parameters-for-fermion-chains-via>.

Qureshi:2023:EWP

- [1318] Izma Qureshi, Tasawar Abbas, Muhammad Imran, and Rameez ul Islam. Exploring wave-particle behaviors of entangled Bragg diffracted neutral atoms. *Journal of Mathematical Physics*, 64(1):012101, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/012101/2870592/Exploring-wave-particle-behaviors-of-entangled>.

daCosta:2023:ESC

- [1319] Bruno G. da Costa, Ignacio S. Gomez, and Biswanath Rath. Exact solution and coherent states of an asymmetric oscillator with position-dependent mass. *Journal of Mathematical Physics*, 64(1):012102, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/012102/2870607/Exact-solution-and-coherent-states-of-an>.

Golovnev:2023:VPC

- [1320] Alexey Golovnev. The variational principle, conformal and disformal transformations, and the degrees of freedom. *Journal of Mathematical Physics*, 64(1):012501, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/012501/2870561/The-variational-principle-conformal-and-disformal>.

Sakovich:2023:NDE

- [1321] A. Sakovich and C. Sormani. The null distance encodes causality. *Journal of Mathematical Physics*, 64(1):012502, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/012502/2870562/The-null-distance-encodes-causality>.

/pubs.aip.org/aip/jmp/article/64/1/012502/2870555/The-null-distance-encodes-causality.

Mitsopoulos:2023:CFI

- [1322] Antonios Mitsopoulos and Michael Tsampanlis. Cubic first integrals of autonomous dynamical systems in E^2 by an algorithmic approach. *Journal of Mathematical Physics*, 64(1):012701, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/012701/2870562/Cubic-first-integrals-of-autonomous-dynamical>

Liu:2023:ASH

- [1323] Qun Liu. Analysis of a stochastic HIV model with cell-to-cell transmission and Ornstein–Uhlenbeck process. *Journal of Mathematical Physics*, 64(1):012702, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/012702/2870575/Analysis-of-a-stochastic-HIV-model-with-cell-to->

Yang:2023:LBC

- [1324] Juan Yang, Jiaxin Gong, Longyu Wu, and Ji Shu. Limiting behavior of center manifolds for stochastic evolutionary equations with delay in varying phase spaces. *Journal of Mathematical Physics*, 64(1):012703, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/012703/2870586/Limiting-behavior-of-center-manifolds-for->

Zhang:2023:STW

- [1325] Ran Zhang and Hongyong Zhao. Strong traveling wave solutions for a nonlocal diffusive susceptible–infectious–recovered model with spatiotemporal delay. *Journal of Mathematical Physics*, 64(1):012704, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/012704/2870657/Strong-traveling-wave-solutions-for-a-nonlocal->

Ahn:2023:RFU

- [1326] Hyunjin Ahn, Junhyeok Byeon, Seung-Yeal Ha, and Jaeyoung Yoon. On the relativistic flocks over the unit sphere and the hyperboloid in a bonding force field. *Journal of Mathematical Physics*, 64(1):012705, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/012705/2870664/On-the-relativistic-flocks-over-the-unit-sphere->

Zessin:2023:CDI

- [1327] Hans Zessin. On cluster dynamics of infinite Newtonian dynamics. *Journal of Mathematical Physics*, 64(1):012706, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/012706/2870649/On-cluster-dynamics-of-infinite-Newtonian-dynamics>.

Goto:2023:AGD

- [1328] Shin itiro Goto. Affine geometric description of thermodynamics. *Journal of Mathematical Physics*, 64(1):013301, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/013301/2870677/Affine-geometric-description-of-thermodynamics>.

Hansen:2023:SMC

- [1329] Ulrik Thinggaard Hansen and Frederik Ravn Klausen. Strict monotonicity, continuity, and bounds on the Kertész line for the random-cluster model on \mathbf{Z}^d . *Journal of Mathematical Physics*, 64(1):013302, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/013302/2870674/Strict-monotonicity-continuity-and-bounds-on-the>.

Gamba:2023:CPB

- [1330] Irene M. Gamba and Milana Pavić-Čolić. On the Cauchy problem for Boltzmann equation modeling a polyatomic gas. *Journal of Mathematical Physics*, 64(1):013303, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/013303/2870688/On-the-Cauchy-problem-for-Boltzmann-equation>.

delRazo:2023:CDM

- [1331] Mauricio J. del Razo, Stefanie Winkelmann, Rupert Klein, and Felix Höfling. Chemical diffusion master equation: Formulations of reaction-diffusion processes on the molecular level. *Journal of Mathematical Physics*, 64(1):013304, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/013304/2870691/Chemical-diffusion-master-equation-Formulations-of>.

Huang:2023:QFP

- [1332] Fang Huang and Chuanzhong Li. Quantum field presentation for generalized Hall–Littlewood functions. *Journal of Mathematical Physics*, 64(1):013501, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/013501/2870660/Quantum-field-presentation-for-generalized-Hall>.

Ding:2023:TFW

- [1333] Xiang-Mao Ding and Xiang Li. 2D Toda τ functions, weighted Hurwitz numbers and the Cayley graph: Determinant representation and recursion formula. *Journal of Mathematical Physics*, 64(1):013502, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/013502/2870667/2D-Toda-functions-weighted-Hurwitz-numbers-and-the>.

Figuerola-O’Farrill:2023:LAC

- [1334] José Figuerola-O’Farrill. Lie algebraic Carroll/ Galilei duality. *Journal of Mathematical Physics*, 64(1):013503, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/013503/2870683/Lie-algebraic-Carroll-Galilei-duality>.

Liu:2023:ASL

- [1335] Qun Liu. Analysis of a stochastic Lotka–Volterra competitive system with infinite delays and Ornstein–Uhlenbeck process. *Journal of Mathematical Physics*, 64(1):013504, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/013504/2870647/Analysis-of-a-stochastic-Lotka-Volterra>.

Torres:2023:CNT

- [1336] Delfin F. M. Torres. Comment on “Noether’s-type theorems on time scales” [J. Math. Phys. **61**, 113502 (2020)]. *Journal of Mathematical Physics*, 64(1):014101, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/014101/2870654/Comment-on-Noether-s-type-theorems-on-time-scales>. See [382].

Bet:2023:EMD

- [1337] Gianmarco Bet, Anna Gallo, and Francesca R. Nardi. Erratum: “Metastability for the degenerate Potts model with negative exter-

nal magnetic field under Glauber dynamics” [J. Math. Phys. **63**, 123303 (2022)]. *Journal of Mathematical Physics*, 64(1):019901, January 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/1/019901/2870659/Erratum-Metastability-for-the-degenerate-Potts>. See [1279].

Diamantini:2023:BTI

- [1338] M. C. Diamantini and C. A. Trugenberger. Bosonic topological insulators at the superconductor-to-superinsulator transition. *Journal of Mathematical Physics*, 64(2):021101, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/021101/2873881/Bosonic-topological-insulators-at-the>.

Ding:2023:VPL

- [1339] Shijin Ding and Cuiyu Wang. Validity of Prandtl layer expansions for steady magnetohydrodynamics over a rotating disk. *Journal of Mathematical Physics*, 64(2):021501, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/021501/2873964/Validity-of-Prandtl-layer-expansions-for-steady>.

Yu:2023:GSC

- [1340] Yanghai Yu, Hui Wang, Jinlu Li, and Xiaolei Yang. Global solutions to the 3D compressible Navier–Stokes equations with a class of special initial data. *Journal of Mathematical Physics*, 64(2):021502, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/021502/2873937/Global-solutions-to-the-3D-compressible-Navier>.

Shi:2023:AAC

- [1341] Xinran Shi, Yunfei Su, and Lei Yao. Asymptotic analysis for 1D compressible Navier–Stokes–Vlasov equations with local alignment force. *Journal of Mathematical Physics*, 64(2):021503, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/021503/2873944/Asymptotic-analysis-for-1D-compressible-Navier>.

Chen:2023:APS

- [1342] Wenhui Chen and Yan Liu. Asymptotic profiles and singular limits for the viscoelastic damped wave equation with memory of

type I. *Journal of Mathematical Physics*, 64(2):021504, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/021504/2873951/Asymptotic-profiles-and-singular-limits-for-the>.

Wang:2023:GWP

- [1343] Fuguo Wang and Xin Zhong. Global well-posedness to the compressible nematic liquid crystal flows with large oscillations and vacuum in 3D exterior domains. *Journal of Mathematical Physics*, 64(2):021505, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/021505/2873957/Global-well-posedness-to-the-compressible-nematic>.

Chen:2023:DWS

- [1344] Honghua Chen, Geng Lai, and Wancheng Sheng. Detonation wave solutions to the scalar combustion models with a singular source term. *Journal of Mathematical Physics*, 64(2):021506, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/021506/2873959/Detonation-wave-solutions-to-the-scalar-combustion>.

Sun:2023:PPS

- [1345] Baoyan Sun. Propagation phenomena of the solution for the relativistic BGK model. *Journal of Mathematical Physics*, 64(2):021507, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/021507/2873915/Propagation-phenomena-of-the-solution-for-the>.

Cho:2023:CCA

- [1346] Yonggeun Cho, Seokchang Hong, and Tohru Ozawa. Charge conjugation approach to scattering for the Hartree type Dirac equations with chirality. *Journal of Mathematical Physics*, 64(2):021508, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/021508/2873890/Charge-conjugation-approach-to-scattering-for-the>.

Liu:2023:NPT

- [1347] Zhongyuan Liu, Ziyang Liu, and Wenhuan Xu. Non-power type perturbation for the critical Hénon problem. *Journal of Mathematical Physics*, 64(2):021509, February 2023. CODEN JMAPAQ.

ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/021509/2873956/Non-power-type-perturbation-for-the-critical-Henon>.

Cao:2023:MPS

- [1348] Daomin Cao, Shanfa Lai, and Weilin Yu. Multi-peak solutions to the Schrödinger equations coupled with a neutral scalar field. *Journal of Mathematical Physics*, 64(2):021510, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/021510/2873877/Multi-peak-solutions-to-the-Schrodinger-equations>.

Han:2023:SEI

- [1349] Xiaoli Han, Xishen Jin, and Yang Wen. Stability and energy identity for Yang–Mills–Higgs pairs. *Journal of Mathematical Physics*, 64(2):021511, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/021511/2873954/Stability-and-energy-identity-for-Yang-Mills-Higgs>.

Hahn:2023:WNSa

- [1350] Nico Hahn, Mario Kieburg, Omri Gat, and Thomas Guhr. Winding number statistics for chiral random matrices: Averaging ratios of determinants with parametric dependence. *Journal of Mathematical Physics*, 64(2):021901, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/021901/2873897/Winding-number-statistics-for-chiral-random>.

Cornean:2023:BEC

- [1351] H. D. Cornean, M. Moscolari, and K. S. Sørensen. Bulk–edge correspondence for unbounded Dirac–Landau operators. *Journal of Mathematical Physics*, 64(2):021902, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/021902/2873934/Bulk-edge-correspondence-for-unbounded-Dirac>.

Muller:2023:SST

- [1352] Peter Müller and Ruth Schulte. Stability of a Szegő-type asymptotics. *Journal of Mathematical Physics*, 64(2):022101, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/022101/2873875/Stability-of-a-Szego-type-asymptotics>.

Sasaki:2023:ESP

- [1353] Ryu Sasaki. Exactly solvable piecewise analytic double well potential $V_D(x) = \min[(x+d)^2, (x-d)^2]$ and its dual single well potential $V_S(x) = \max[(x+d)^2, (x-d)^2]$. *Journal of Mathematical Physics*, 64(2):022102, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/022102/2873941/Exactly-solvable-piecewise-analytic-double-well>.

DelasCuevas:2023:MSL

- [1354] Gemma De las Cuevas, Tim Netzer, and Inga Valentiner-Branth. Magic squares: Latin, semiclassical, and quantum. *Journal of Mathematical Physics*, 64(2):022201, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/022201/2873948/Magic-squares-Latin-semiclassical-and-quantum>.

DeBievre:2023:RIN

- [1355] S. De Bièvre. Relating incompatibility, noncommutativity, uncertainty, and Kirkwood–Dirac nonclassicality. *Journal of Mathematical Physics*, 64(2):022202, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/022202/2873952/Relating-incompatibility-noncommutativity>.

Zhu:2023:HAT

- [1356] Honglin Zhu. The Hermitian axiom on two-dimensional topological quantum field theories. *Journal of Mathematical Physics*, 64(2):022301, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/022301/2874008/The-Hermitian-axiom-on-two-dimensional-topological>.

Celerier:2023:FII

- [1357] M.-N. Célériér. Fully integrated interior solutions of GR for stationary rigidly rotating cylindrical perfect fluids. *Journal of Mathematical Physics*, 64(2):022501, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/022501/2874048/Fully-integrated-interior-solutions-of-GR-for>.

Heefer:2023:MKS

- [1358] Sjors Heefer, Christian Pfeifer, Jorn van Voorthuizen, and Andrea Fuster. On the metrizability of m -Kropina spaces with closed null one-form. *Journal of Mathematical Physics*, 64(2):022502, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/022502/2874027/On-the-metrizability-of-m-Kropina-spaces-with>

Coley:2023:TGS

- [1359] A. A. Coley and R. J. van den Hoogen. Teleparallel geometry with a single affine symmetry. *Journal of Mathematical Physics*, 64(2):022503, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/022503/2874051/Teleparallel-geometry-with-a-single-affine>.

Moore:2023:BER

- [1360] Kenneth Moore and Eric Woolgar. Bakry-Émery Ricci curvature, X -minimal hypersurfaces, and near horizon geometries. *Journal of Mathematical Physics*, 64(2):022504, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/022504/2874038/Bakry-Emery-Ricci-curvature-X-minimal>.

Xie:2023:UAN

- [1361] Yongqin Xie, Di Liu, Jiangwei Zhang, and Ximeng Liu. Uniform attractors for nonclassical diffusion equations with perturbed parameter and memory. *Journal of Mathematical Physics*, 64(2):022701, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/022701/2874054/Uniform-attractors-for-nonclassical-diffusion>.

Chang:2023:WPD

- [1362] Qingquan Chang and Dandan Li. Well-posedness and dynamics of 2D Navier-Stokes equations with moving boundary. *Journal of Mathematical Physics*, 64(2):022702, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/022702/2874013/Well-posedness-and-dynamics-of-2D-Navier-Stokes>.

Cao:2023:SCN

- [1363] Nan Cao and Xianlong Fu. On solutions of a class of neutral evolution equations with discrete nonlocal conditions. *Journal of Mathematical*

Physics, 64(2):022703, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/022703/2874058/On-solutions-of-a-class-of-neutral-evolution>.

Arslan:2023:RSL

- [1364] Ali Arslan, Giovanni Fantuzzi, John Craske, and Andrew Wynn. Rigorous scaling laws for internally heated convection at infinite Prandtl number. *Journal of Mathematical Physics*, 64(2):023101, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/023101/2874060/Rigorous-scaling-laws-for-internally-heated>.

Bain:2023:LCF

- [1365] Emily Bain. Local correlation functions of the two-periodic weighted Aztec diamond in mesoscopic limit. *Journal of Mathematical Physics*, 64(2):023301, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/023301/2874072/Local-correlation-functions-of-the-two-periodic>.

Zamparo:2023:LDQ

- [1366] Marco Zamparo and Massimiliano Semeraro. Large deviations for quadratic functionals of stable Gauss–Markov chains and entropy production. *Journal of Mathematical Physics*, 64(2):023302, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/023302/2874002/Large-deviations-for-quadratic-functionals-of>

Poghosyan:2023:UAP

- [1367] Suren Poghosyan and Hans Zessin. Uniqueness and absence of percolation of classical gases. *Journal of Mathematical Physics*, 64(2):023303, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/023303/2874010/Uniqueness-and-absence-of-percolation-of-classical>.

Baez:2023:CT

- [1368] John C. Baez, Owen Lynch, and Joe Moeller. Compositional thermostatics. *Journal of Mathematical Physics*, 64(2):023304, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/023304/2874017/Compositional-thermostatics>.

Cerjan:2023:QPI

- [1369] Alexander Cerjan, Terry A. Loring, and Fredy Vides. Quadratic pseudospectrum for identifying localized states. *Journal of Mathematical Physics*, 64(2):023501, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/023501/2874032/Quadratic-pseudospectrum-for-identifying-localized>.

Arthamonov:2023:TFI

- [1370] S. Arthamonov, J. Harnad, and J. Hurtubise. Tau functions, infinite Grassmannians, and lattice recurrences. *Journal of Mathematical Physics*, 64(2):023502, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/023502/2874044/Tau-functions-infinite-Grassmannians-and-lattice>.

Akemann:2023:EGE

- [1371] G. Akemann, M. Duits, and L. D. Molag. The elliptic Ginibre ensemble: a unifying approach to local and global statistics for higher dimensions. *Journal of Mathematical Physics*, 64(2):023503, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/023503/2874065/The-elliptic-Ginibre-ensemble-A-unifying-approach>.
Special collection in honor of Freeman Dyson.

Alcock-Zeilinger:2023:WSS

- [1372] Judith Alcock-Zeilinger, Stefan Keppeler, Simon Plätzer, and Malin Sjö Dahl. Wigner $6j$ symbols for $SU(N)$: Symbols with at least two quark-lines. *Journal of Mathematical Physics*, 64(2):023504, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/023504/2874159/Wigner-6j-symbols-for-SU-N-Symbols-with-at-least>.

Meljanac:2023:NYM

- [1373] S. Meljanac and S. Mignemi. Noncommutative Yang model and its generalizations. *Journal of Mathematical Physics*, 64(2):023505, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/023505/2874152/Noncommutative-Yang-model-and-its-generalizations>.

Katkov:2023:EMM

- [1374] Mikhail Katkov, Misha Tsodyks, Michelangelo Naim, and Antonis Georgiou. Erratum: “Mathematical models of human memory” [J. Math. Phys. **63**, 073303 (2022)]. *Journal of Mathematical Physics*, 64(2):029901, February 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/2/029901/2874149/Erratum-Mathematical-models-of-human-memory-J-Math>. See [1090].

Yoldas:2023:QHE

- [1375] Havva Yoldaş. On quantitative hypocoercivity estimates based on Harris-type theorems. *Journal of Mathematical Physics*, 64(3):031101, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/031101/2881551/On-quantitative-hypocoercivity-estimates-based-on>.

Gu:2023:ILI

- [1376] Xiaoyu Gu, Yaobin Ou, and Lu Yang. Incompressible limit of isentropic magnetohydrodynamic equations with ill-prepared data in bounded domains. *Journal of Mathematical Physics*, 64(3):031501, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/031501/2881547/Incompressible-limit-of-isentropic>.

Watson:2023:BMD

- [1377] Alexander B. Watson, Tianyu Kong, Allan H. MacDonald, and Mitchell Luskin. Bistritzer–MacDonald dynamics in twisted bilayer graphene. *Journal of Mathematical Physics*, 64(3):031502, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/031502/2881557/Bistritzer-MacDonald-dynamics-in-twisted-bilayer>.

Gao:2023:ERF

- [1378] Liu Gao and Zhong Tan. Existence results for fractional Kirchhoff problems with magnetic field and supercritical growth. *Journal of Mathematical Physics*, 64(3):031503, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/031503/2881539/Existence-results-for-fractional-Kirchhoff>.

Tan:2023:GSE

- [1379] Lihua Tan and Yingzhe Fan. Global solutions and exponential time decay rates to the Navier–Stokes–Vlasov–Fokker–Planck system in low regularity space. *Journal of Mathematical Physics*, 64(3):031504, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/031504/2881534/Global-solutions-and-exponential-time-decay-rates>.

Zhao:2023:GEI

- [1380] Zhiwen Zhao. Gradient estimates for the insulated conductivity problem: The case of m -convex inclusions. *Journal of Mathematical Physics*, 64(3):031505, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/031505/2881527/Gradient-estimates-for-the-insulated-conductivity>.

Zhao:2023:SSN

- [1381] Xiaopeng Zhao. On the strong solution of 3D non-isothermal Navier–Stokes–Cahn–Hilliard equations. *Journal of Mathematical Physics*, 64(3):031506, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/031506/2881545/On-the-strong-solution-of-3D-non-isothermal-Navier>.

Chong:2023:OSP

- [1382] Gezi Chong and Ying Fu. Orbital stability of periodic peakons for a new higher-order μ -Camassa–Holm equation. *Journal of Mathematical Physics*, 64(3):031507, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/031507/2881520/Orbital-stability-of-periodic-peakons-for-a-new>.

Bal:2023:TCC

- [1383] Guillaume Bal. Topological charge conservation for continuous insulators. *Journal of Mathematical Physics*, 64(3):031508, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/031508/2881542/Topological-charge-conservation-for-continuous>.

Niu:2023:LUM

- [1384] Yahui Niu, Shuying Tian, and Pingping Yang. Local uniqueness of multi-peak solutions to a class of Schrödinger equations with com-

peting potential. *Journal of Mathematical Physics*, 64(3):031509, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/031509/2881526/Local-uniqueness-of-multi-peak-solutions-to-a>.

Jarrin:2023:RWS

- [1385] Oscar Jarrín. Regularity of weak solutions for the stationary Ericksen–Leslie and MHD systems. *Journal of Mathematical Physics*, 64(3):031510, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/031510/2881543/Regularity-of-weak-solutions-for-the-stationary->

Ma:2023:SLM

- [1386] Guorui Ma, Stephen S.-T. Yau, and Huaiqing Zuo. k -th singular locus moduli algebras of singularities and their derivation Lie algebras. *Journal of Mathematical Physics*, 64(3):031701, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/031701/2881524/k-th-singular-locus-moduli-algebras-of>.

Ceniceros:2023:RFO

- [1387] Jose Cenicerros, Mohamed Elhamdadi, Brendan Magill, and Gabriela Rosario. RNA foldings, oriented stuck knots, and state sum invariants. *Journal of Mathematical Physics*, 64(3):031702, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/031702/2881559/RNA-foldings-oriented-stuck-knots-and-state-sum>.

Coquereaux:2023:AIV

- [1388] Robert Coquereaux. About integer-valued variants of the theta and $6j$ symbols. *Journal of Mathematical Physics*, 64(3):031703, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/031703/2881531/About-integer-valued-variants-of-the-theta-and-6j>.

Maekawa:2023:AVB

- [1389] Daisuke Maekawa and Hal Tasaki. The asymmetric valence-bond-solid states in quantum spin chains: The difference between odd and even spins. *Journal of Mathematical Physics*, 64(3):031901, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658

(electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/031901/2881535/The-asymmetric-valence-bond-solid-states-in>.

Kellendonk:2023:BST

- [1390] Johannes Kellendonk. Bragg spectrum, K -theory, and gap labeling of aperiodic solids. *Journal of Mathematical Physics*, 64(3):031902, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/031902/2881615/Bragg-spectrum-K-theory-and-gap-labeling-of>.

Frohlich:2023:GIA

- [1391] Jürg Fröhlich. Gauge invariance and anomalies in condensed matter physics. *Journal of Mathematical Physics*, 64(3):031903, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/031903/2881632/Gauge-invariance-and-anomalies-in-condensed-matter>.

Singh:2023:TGS

- [1392] Vibhav Narayan Singh, Mohammad Umar, Mohammad Hasan, and Bhabani Prasad Mandal. Tunneling from general Smith–Volterra–Cantor potential. *Journal of Mathematical Physics*, 64(3):032101, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/032101/2881636/Tunneling-from-general-Smith-Volterra-Cantor>.

Stan:2023:SRV

- [1393] A. I. Stan, G. Popa, and R. Dutta. A study of random variables in terms of the number operator. *Journal of Mathematical Physics*, 64(3):032102, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/032102/2881614/A-study-of-random-variables-in-terms-of-the-number>.

Szabados:2023:MCS

- [1394] László B. Szabados. The “most classical” states of Euclidean invariant elementary quantum mechanical systems. *Journal of Mathematical Physics*, 64(3):032103, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/032103/2881596/The-most-classical-states-of-Euclidean-invariant>.

Szabados:2023:OFM

- [1395] László B. Szabados. An odd feature of the “most classical” states of $SU(2)$ invariant quantum mechanical systems. *Journal of Mathematical Physics*, 64(3):032104, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/032104/2881627/An-odd-feature-of-the-most-classical-states-of-SU>.

Giraldi:2023:TGC

- [1396] Filippo Giraldi and Francesco Mainardi. Truncated generalized coherent states. *Journal of Mathematical Physics*, 64(3):032105, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/032105/2881601/Truncated-generalized-coherent-states>.

Ruskai:2023:LAR

- [1397] Mary Beth Ruskai and Jon Yard. Local additivity revisited. *Journal of Mathematical Physics*, 64(3):032201, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/032201/2881610/Local-additivity-revisited>. Special collection in honor of Freeman Dyson.

Blanco:2023:DFA

- [1398] David Serrano Blanco. Dirac field in AdS_2 and representations of $\tilde{SL}(2, \mathbf{R})$. *Journal of Mathematical Physics*, 64(3):032301, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/032301/2881631/Dirac-field-in-AdS2-and-representations-of-SL-2-R>.

Goswami:2023:MGH

- [1399] Abhishek Goswami. Mass gap in $U(1)$ Higgs–Yukawa model on a unit lattice. *Journal of Mathematical Physics*, 64(3):032302, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/032302/2881624/Mass-gap-in-U-1-Higgs-Yukawa-model-on-a-unit>.

Mastropietro:2023:ACL

- [1400] Vieri Mastropietro. Anomaly cancellation in the lattice effective electroweak theory. *Journal of Mathematical Physics*, 64(3):032303, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/032303/2881594/Anomaly-cancellation-in-the-lattice-effective>.

Escudero:2023:HDC

- [1401] Valentina Guarín Escudero, Cristhiam Lopez-Arcos, and Alexander Quintero Vélez. Homotopy double copy and the Kawai–Lewellen–Tye relations for the non-abelian and tensor Navier–Stokes equations. *Journal of Mathematical Physics*, 64(3):032304, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/032304/2881598/Homotopy-double-copy-and-the-Kawai-Lewellen-Tye>.

Celerier:2023:SSRa

- [1402] M.-N. Célérier. Study of stationary rigidly rotating anisotropic cylindrical fluids with new exact interior solutions of GR. II. More about axial pressure. *Journal of Mathematical Physics*, 64(3):032501, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/032501/2881604/Study-of-stationary-rigidly-rotating-anisotropic>.

Keeton:2023:MGL

- [1403] Charles R. Keeton, Erik Lundberg, and Sean Perry. Multiplane gravitational lenses with an abundance of images. *Journal of Mathematical Physics*, 64(3):032502, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/032502/2881612/Multiplane-gravitational-lenses-with-an-abundance>.

McNutt:2023:FBA

- [1404] D. D. McNutt, A. A. Coley, and R. J. van den Hoogen. A frame based approach to computing symmetries with non-trivial isotropy groups. *Journal of Mathematical Physics*, 64(3):032503, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/032503/2881713/A-frame-based-approach-to-computing-symmetries>.

Natario:2023:EFD

- [1405] José Natário and Flavio Rossetti. Explicit formulas and decay rates for the solution of the wave equation in cosmological spacetimes. *Journal of Mathematical Physics*, 64(3):032504, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/032504/2881735/Explicit-formulas-and-decay-rates-for-the-solution>.

Geng:2023:QSN

- [1406] Jiansheng Geng, Yingnan Sun, and W.-M. Wang. Quasiperiodic solutions to nonlinear random Schrödinger equations at fixed potential realizations. *Journal of Mathematical Physics*, 64(3):032701, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/032701/2881732/Quasiperiodic-solutions-to-nonlinear-random>.

Chen:2023:GTH

- [1407] Desu Chen, Chao Wang, and Zhien Li. General theory of the higher-order linear quaternion q -difference equations through the quaternion determinant algorithm and the characteristic polynomial. *Journal of Mathematical Physics*, 64(3):032702, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/032702/2881728/General-theory-of-the-higher-order-linear>.

Ryan:2023:WAL

- [1408] Joseph Ryan. When action is not least for systems with action-dependent Lagrangians. *Journal of Mathematical Physics*, 64(3):032901, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/032901/2881724/When-action-is-not-least-for-systems-with-action>.

Kang:2023:MPP

- [1409] Yuan Bao Kang. Markov properties of partially open quantum random walks. *Journal of Mathematical Physics*, 64(3):033301, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/033301/2881684/Markov-properties-of-partially-open-quantum-random>.

Azuaje:2023:CCT

- [1410] R. Azuaje and A. M. Escobar-Ruiz. Canonical and canonoid transformations for Hamiltonian systems on (co)symplectic and (co)contact manifolds. *Journal of Mathematical Physics*, 64(3):033501, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/033501/2881689/Canonical-and-canonoid-transformations-for>.

Dinar:2023:LDB

- [1411] Yassir Dinar. Low-dimensional bihamiltonian structures of topological type. *Journal of Mathematical Physics*, 64(3):033502, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/033502/2881704/Low-dimensional-bihamiltonian-structures-of>.

DeNittis:2023:NLF

- [1412] Giuseppe De Nittis and Kiyonori Gomi. A new light on the FKMM invariant and its consequences. *Journal of Mathematical Physics*, 64(3):033503, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/033503/2881719/A-new-light-on-the-FKMM-invariant-and-its>.

Carstea:2023:SAB

- [1413] A. S. Carstea. Singularity analysis and bilinear approach to some Bogoyavlensky equations. *Journal of Mathematical Physics*, 64(3):033504, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/033504/2881718/Singularity-analysis-and-bilinear-approach-to-some>.

DellAtti:2023:CDN

- [1414] Marta Dell’Atti and Pierandrea Vergallo. Classification of degenerate non-homogeneous Hamiltonian operators. *Journal of Mathematical Physics*, 64(3):033505, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/033505/2881679/Classification-of-degenerate-non-homogeneous>.

Alhaidari:2023:RCP

- [1415] A. D. Alhaidari. Revisiting the Coulomb problem: a novel representation of the confluent hypergeometric function as an infinite sum of discrete Bessel functions. *Journal of Mathematical Physics*, 64(3):033506, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/033506/2881686/Revisiting-the-Coulomb-problem-A-novel>.

Rivas:2023:NCF

- [1416] Xavier Rivas. Nonautonomous k -contact field theories. *Journal of Mathematical Physics*, 64(3):033507, March 2023. CODEN JMAPAQ. ISSN

0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/033507/2881697/Nonautonomous-k-contact-field-theories>.

Liu:2023:PLL

- [1417] Wencai Liu. Power law logarithmic bounds of moments for long range operators in arbitrary dimension. *Journal of Mathematical Physics*, 64(3):033508, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/033508/2881706/Power-law-logarithmic-bounds-of-moments-for-long>.

Adler:2023:DIR

- [1418] Mark Adler and Pierre van Moerbeke. Double interlacing in random tiling models. *Journal of Mathematical Physics*, 64(3):033509, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/3/033509/2881737/Double-interlacing-in-random-tiling-models>. Special collection in honor of Freeman Dyson.

Osada:2023:EUD

- [1419] Hirofumi Osada and Shota Osada. Ergodicity of unlabeled dynamics of Dyson's model in infinite dimensions. *Journal of Mathematical Physics*, 64(3):043505, March 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/4/043505/2877773/Ergodicity-of-unlabeled-dynamics-of-Dyson-s-model?searchresult=1>. Special collection in honor of Freeman Dyson.

Tasaki:2023:RIT

- [1420] Hal Tasaki. Rigorous index theory for one-dimensional interacting topological insulators. *Journal of Mathematical Physics*, 64(4):041903, April 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/4/041903/2883460/Rigorous-index-theory-for-one-dimensional>.

An:2023:LTT

- [1421] Xiaowei An, Huixia He, and Xianfa Song. Liouville type theorem and Morse indices of a semilinear elliptic equation with nonlocal nonlinearities. *Journal of Mathematical Physics*, 64(5):051501, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/051501/2887571/Liouville-type-theorem-and-Morse-indices-of-a>.

Wang:2023:RCA

- [1422] Peng Wang and Zhengguang Guo. A regularity criterion for the 3D axisymmetric Boussinesq equations with non-zero swirl. *Journal of Mathematical Physics*, 64(5):051502, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/051502/2889010/A-regularity-criterion-for-the-3D-axisymmetric>.

Zhang:2023:RHP

- [1423] Xiao-Fan Zhang and Shou-Fu Tian. Riemann–Hilbert problem for the Fokas–Lenells equation in the presence of high-order discrete spectrum with non-vanishing boundary conditions. *Journal of Mathematical Physics*, 64(5):051503, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/051503/2889011/Riemann-Hilbert-problem-for-the-Fokas-Lenells>.

Chatta:2023:LWP

- [1424] Soufiane Chatta, Boualem Khouider, and M’hamed Kesri. Linear well posedness of regularized equations of sea-ice dynamics. *Journal of Mathematical Physics*, 64(5):051504, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/051504/2889492/Linear-well-posedness-of-regularized-equations-of>.

Wang:2023:RCG

- [1425] Jinhuan Wang, Wei Tan, and Yongsheng Nie. A regularity criterion for the 3D generalized MHD system involving partial components. *Journal of Mathematical Physics*, 64(5):051505, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/051505/2890217/A-regularity-criterion-for-the-3D-generalized-MHD>.

Zhai:2023:OWP

- [1426] Xiaoping Zhai, Yiren Chen, Yongsheng Li, and Yongye Zhao. Optimal well-posedness for the pressureless Euler–Navier–Stokes system. *Journal of Mathematical Physics*, 64(5):051506, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/051506/2890427/Optimal-well-posedness-for-the-pressureless-Euler>.

Ge:2023:RNN

- [1427] Bin Ge, Qinghai Cao, and Yu Zhang. Renormalized non-negative solutions for the double phase Dirichlet problems with L^1 data. *Journal of Mathematical Physics*, 64(5):051507, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/051507/2890776/Renormalized-non-negative-solutions-for-the-double>.

Tang:2023:MMI

- [1428] Zhongwei Tang, Lushun Wang, and Huafei Xie. Multiple mixed interior and boundary peaks synchronized solutions for nonlinear coupled elliptic systems. *Journal of Mathematical Physics*, 64(5):051508, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/051508/2891376/Multiple-mixed-interior-and-boundary-peaks>.

Zhao:2023:EDC

- [1429] Jin-Wei Zhao, Bin Ge, and Lu Liu. Effective dynamics for a class of stochastic weakly damped wave equation with a fast oscillation. *Journal of Mathematical Physics*, 64(5):051509, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/051509/2891412/Effective-dynamics-for-a-class-of-stochastic>.

dosSantos:2023:SQS

- [1430] Gelson C. G. dos Santos, Laila C. Fontinele, Rubia G. Nascimienta, and Suellen Cristina Q. Arrudab. Solutions for a quasilinear Schrödinger equation: Subcritical and critical cases. *Journal of Mathematical Physics*, 64(5):051510, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/051510/2892276/Solutions-for-a-quasilinear-Schrodinger-equation>.

Liu:2023:QPS

- [1431] Yang Liu, Byungsoo Moon, Vicențiu D. Rădulescu, Runzhang Xu, and Chao Yang. Qualitative properties of solution to a viscoelastic Kirchhoff-like plate equation. *Journal of Mathematical Physics*, 64(5):051511, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/051511/2892545/Qualitative-properties-of-solution-to-a>.

Zhang:2023:LSA

- [1432] Yu Zhang and Shuai Fan. Limits of solutions to the Aw–Rascle traffic flow model with generalized Chaplygin gas by flux approximation. *Journal of Mathematical Physics*, 64(5):051512, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/051512/2892935/Limits-of-solutions-to-the-Aw-Rascle-traffic-flow>.

Argota-Quiroz:2023:QRG

- [1433] J. N. Argota-Quiroz and S. Majid. Quantum Riemannian geometry of the discrete interval and q -deformation. *Journal of Mathematical Physics*, 64(5):051701, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/051701/2890221/Quantum-Riemannian-geometry-of-the-discrete>.

Watanabe:2023:GSD

- [1434] Haruki Watanabe, Meng Cheng, and Yohei Fuji. Ground state degeneracy on torus in a family of ZN ZN ZN toric code. *Journal of Mathematical Physics*, 64(5):051901, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/051901/2891377/Ground-state-degeneracy-on-torus-in-a-family-of-ZN>.

Bruzda:2023:BCC

- [1435] W. Bruzda. Block-circulant complex Hadamard matrices. *Journal of Mathematical Physics*, 64(5):052201, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/052201/2890042/Block-circulant-complex-Hadamard-matrices>.

Geisler:2023:ASN

- [1436] Jakob Geisler. Absence of submultiplicative norms for Wick-ordered operator products. *Journal of Mathematical Physics*, 64(5):052301, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/052301/2892934/Absence-of-submultiplicative-norms-for-Wick>.

Bhattacharya:2023:CFP

- [1437] Subhra Bhattacharya and Subhasis Nalui. Complexity factor parameterization for traversable wormholes. *Journal of Mathematical Physics*, 64(5):052501, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488

(print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/052501/2887577/Complexity-factor-parameterization-for-traversable>.

Celerier:2023:SSRb

- [1438] M.-N. C  lerier. Study of stationary rigidly rotating anisotropic cylindrical fluids with new exact interior solutions of GR. IV. Radial pressure. *Journal of Mathematical Physics*, 64(5):052502, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/052502/2890038/Study-of-stationary-rigidly-rotating-anisotropic>.

Ju:2023:PUI

- [1439] Xuewei Ju. Pathwise unstable invariant manifolds reduction for stochastic evolution equations driven by nonlinear noise. *Journal of Mathematical Physics*, 64(5):052701, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/052701/2887914/Pathwise-unstable-invariant-manifolds-reduction>.

Chandre:2023:CNB

- [1440] Cristel Chandre and Atsushi Horikoshi. Classical Nambu brackets in higher dimensions. *Journal of Mathematical Physics*, 64(5):052702, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/052702/2889494/Classical-Nambu-brackets-in-higher-dimensions>.

Zhang:2023:PEA

- [1441] Jiangwei Zhang, Zhiming Liu, and Jianhua Huang. Pullback exponential attractors for second-order lattice system with nonstandard growth condition. *Journal of Mathematical Physics*, 64(5):052703, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/052703/2890040/Pullback-exponential-attractors-for-second-order>.

Guan:2023:BAE

- [1442] Yi Guan. Boundedness of atmospheric Ekman flows with two-layer eddy viscosity. *Journal of Mathematical Physics*, 64(5):052704, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/052704/2891413/Boundedness-of-atmospheric-Ekman-flows-with-two>.

Perrella:2023:EGS

- [1443] David Perrella, Nathan Duignan, and David Pfefferlé. Existence of global symmetries of divergence-free fields with first integrals. *Journal of Mathematical Physics*, 64(5):052705, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/052705/2892544/Existence-of-global-symmetries-of-divergence-free>. See erratum [1753].

Flandoli:2023:NBV

- [1444] Franco Flandoli and Ruojun Huang. Noise based on vortex structures in 2D and 3D. *Journal of Mathematical Physics*, 64(5):053101, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/053101/2890029/Noise-based-on-vortex-structures-in-2D-and-3D>.

Yu:2023:SIL

- [1445] Qian Yu. Self-intersection local time derivative for systems of nonlinear stochastic heat equations. *Journal of Mathematical Physics*, 64(5):053301, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/053301/2889501/Self-intersection-local-time-derivative-for>

Fialho:2023:APN

- [1446] Paula M. S. Fialho, Bernardo N. B. de Lima, Aldo Procacci, and Benedetto Scoppola. On the analyticity of the pressure for a non-ideal gas with high density boundary conditions. *Journal of Mathematical Physics*, 64(5):053302, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/053302/2890222/On-the-analyticity-of-the-pressure-for-a-non-ideal>.

Ma:2023:DFM

- [1447] Shilin Ma and Dafeng Zuo. Dubrovin–Frobenius manifolds associated with B_n and the constrained KP hierarchy. *Journal of Mathematical Physics*, 64(5):053501, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/053501/2887605/Dubrovin-Frobenius-manifolds-associated-with-Bn>.

Zhang:2023:ETO

- [1448] Yongshuai Zhang, Deqin Qiu, and Jingsong He. Explicit N -th order solutions of Fokas–Lenells equation based on revised Riemann–

Hilbert approach. *Journal of Mathematical Physics*, 64(5):053502, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/053502/2890041/Explicit-Nth-order-solutions-of-Fokas-Lenells>.

Odake:2023:DOR

- [1449] Satoru Odake. Discrete orthogonality relations for the multi-indexed orthogonal polynomials in discrete quantum mechanics with pure imaginary shifts. *Journal of Mathematical Physics*, 64(5):053503, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/053503/2890117/Discrete-orthogonality-relations-for-the-multi->

Joseph:2023:GCC

- [1450] Collin Mark Joseph and Ralf Meyer. Geometric construction of classes in van Daele's K -theory. *Journal of Mathematical Physics*, 64(5):053504, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/053504/2891378/Geometric-construction-of-classes-in-van-Daele-s-K>.

Montani:2023:LOS

- [1451] H. Montani. Lagrangian and orthogonal splittings, quasitriangular Lie bialgebras, and almost complex product structures. *Journal of Mathematical Physics*, 64(5):053505, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/053505/2891856/Lagrangian-and-orthogonal-splittings>.

Aniello:2023:TCO

- [1452] Paolo Aniello, Stefano Mancini, and Vincenzo Parisi. Trace class operators and states in p -adic quantum mechanics. *Journal of Mathematical Physics*, 64(5):053506, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/053506/2892280/Trace-class-operators-and-states-in-p-adic-quantum>.

Malkoun:2023:NPA

- [1453] Joseph Malkoun. A new proof of Atiyah's conjecture on configurations of four points. *Journal of Mathematical Physics*, 64(5):053507, May 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/5/053507/2892933/A-new-proof-of-Atiyah-s-conjecture-on>.

Xu:2023:NTR

- [1454] Yongjun Xu and Jialei Chen. A new type restricted quantum group. *Journal of Mathematical Physics*, 64(6):061701, June 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/6/061701/2893747/A-new-type-restricted-quantum-group>.

Thiang:2023:TES

- [1455] Guo Chuan Thiang. Topological edge states of 1D chains and index theory. *Journal of Mathematical Physics*, 64(6):061901, June 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/6/061901/2893748/Topological-edge-states-of-1D-chains-and-index>.

Kubu:2023:CFO

- [1456] Ondřej Kubů and Libor Šnobl. Cylindrical first-order superintegrability with complex magnetic fields. *Journal of Mathematical Physics*, 64(6):062101, June 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/6/062101/2893746/Cylindrical-first-order-superintegrability-with>.

Xiong:2023:ENC

- [1457] Xuanqing Xiong and Qihuai Liu. Explicit nondegeneracy conditions of KAM tori for the planar N -point vortex systems. *Journal of Mathematical Physics*, 64(6):062701, June 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/6/062701/2893744/Explicit-nondegeneracy-conditions-of-KAM-tori-for>.

Sasakura:2023:EAE

- [1458] Naoki Sasakura. Exact analytic expressions of real tensor eigenvalue distributions of Gaussian tensor model for small N . *Journal of Mathematical Physics*, 64(6):063501, June 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/6/063501/2893745/Exact-analytic-expressions-of-real-tensor>.

Durand:2023:MFT

- [1459] Loyal Durand. Mehler–Fock transforms and retarded radiative Green functions in hyperbolic and spherical spaces. *Journal of Mathematical*

Physics, 64(6):063502, June 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/6/063502/2893751/Mehler-Fock-transforms-and-retarded-radiative>.

Ji:2023:APE

- [1460] Lijie Ji, Zhiguo Yang, Zhuoning Li, Dong Wu, Shi Jin, and Zhenli Xu. An asymptotic-preserving and energy-conserving particle-in-cell method for Vlasov–Maxwell equations. *Journal of Mathematical Physics*, 64(6):063503, June 1, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/6/063503/2893958/An-asymptotic-preserving-and-energy-conserving>.

E:2023:MLA

- [1461] Weinan E, Huan Lei, Pinchen Xie, and Linfeng Zhang. Machine learning-assisted multi-scale modeling. *Journal of Mathematical Physics*, 64(7):071101, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/071101/2900787/Machine-learning-assisted-multi-scale-modeling>.

Xu:2023:GBF

- [1462] Lu Xu, Li Yang, and Qiao Xin. Global boundedness for a food chain model with general logistic source. *Journal of Mathematical Physics*, 64(7):071501, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/071501/2900785/Global-boundedness-for-a-food-chain-model-with>.

Du:2023:QSP

- [1463] Yao Du, Jiabao Su, and Cong Wang. The quasilinear Schrödinger–Poisson system. *Journal of Mathematical Physics*, 64(7):071502, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/071502/2901627/The-quasilinear-Schrodinger-Poisson-system>.

Zhao:2023:GBP

- [1464] Zhongzi Zhao and Ruyun Ma. Global bifurcation of positive solutions of a quasilinear indefinite Neumann problem in some FLRW spacetimes. *Journal of Mathematical Physics*, 64(7):071503, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/071503/2901816/Global-bifurcation-of-positive-solutions-of-a>.

Wang:2023:GET

- [1465] Yinxia Wang, Zehua Luo, and Dan Li. Global existence and time-decay rates of solutions to the generalized Boussinesq equation with weak damping. *Journal of Mathematical Physics*, 64(7):071504, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/071504/2902202/Global-existence-and-time-decay-rates-of-solutions>.

Sohn:2023:MPS

- [1466] Juhee Sohn. Mountain pass solution for the self-dual Einstein–Maxwell–Higgs model on compact surfaces. *Journal of Mathematical Physics*, 64(7):071505, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/071505/2902638/Mountain-pass-solution-for-the-self-dual-Einstein>.

Lin:2023:GWP

- [1467] Hongxia Lin, Heng Zhang, Sen Liu, and Qing Sun. Global well-posedness and decay of the 2D incompressible MHD equations with horizontal magnetic diffusion. *Journal of Mathematical Physics*, 64(7):071506, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/071506/2903534/Global-well-posedness-and-decay-of-the-2D>.

Lei:2023:CCV

- [1468] Zhoutong Lei and Zhiqiang Shao. Concentration and cavitation in the vanishing pressure limit of solutions to the relativistic Euler equations with the logarithmic equation of state. *Journal of Mathematical Physics*, 64(7):071507, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/071507/2903821/Concentration-and-cavitation-in-the-vanishing>.

Xu:2023:BFL

- [1469] Zirui Xu and Qiang Du. Bifurcation and fission in the liquid drop model: a phase-field approach. *Journal of Mathematical Physics*, 64(7):071508, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/071508/2904103/Bifurcation-and-fission-in-the-liquid-drop-model-A>.

Moscolari:2023:UGW

- [1470] Massimo Moscolari and Gianluca Panati. Ultra-generalized Wannier bases: Are they relevant to topological transport? *Journal of Mathematical Physics*, 64(7):071901, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/071901/2900786/Ultra-generalized-Wannier-bases-Are-they-relevant>.

Semenoff:2023:BFZ

- [1471] Gordon W. Semenoff. Boundary ferromagnetism in zigzag edged graphene. *Journal of Mathematical Physics*, 64(7):071902, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/071902/2903535/Boundary-ferromagnetism-in-zigzag-edged-graphene>.

Bachmann:2023:DAA

- [1472] Sven Bachmann, Bruno Nachtergaele, and Siddharth Vadnerkar. Dynamical Abelian anyons with bound states and scattering states. *Journal of Mathematical Physics*, 64(7):071903, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/071903/2903823/Dynamical-Abelian-anyons-with-bound-states-and>.

Ligthart:2023:IHP

- [1473] Laurens T. Ligthart and David Gross. The inflation hierarchy and the polarization hierarchy are complete for the quantum bilocal scenario. *Journal of Mathematical Physics*, 64(7):072201, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/072201/2901817/The-inflation-hierarchy-and-the-polarization>.

Belgiorno:2023:SPK

- [1474] F. Belgiorno and S. L. Cacciatori. Spectral properties for the Klein-Gordon Hamiltonian in charged black hole backgrounds. *Journal of Mathematical Physics*, 64(7):072301, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/072301/2900788/Spectral-properties-for-the-Klein-Gordon>.

Dugan:2023:STH

- [1475] William T. Dugan, Loïc Foissy, and Karen Yeats. Sequences of trees and higher-order renormalization group equations. *Journal of Mathematical Physics*, 64(7):072302, July 28, 2023. CODEN JMAPAQ. ISSN

0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/072302/2902967/Sequences-of-trees-and-higher-order>.

Steininger:2023:CPP

- [1476] F. Steininger and P. T. Chruściel. The Cauchy problem for the Proca equation in gravitating dielectric media. *Journal of Mathematical Physics*, 64(7):072501, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/072501/2900789/The-Cauchy-problem-for-the-Proca-equation-in>.

Ginoux:2023:ZHB

- [1477] Jean-Marc Ginoux and Jaume Llibre. Zero-Hopf bifurcation in the Chua's circuit. *Journal of Mathematical Physics*, 64(7):072701, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/072701/2900784/Zero-Hopf-bifurcation-in-the-Chua-s-circuit>.

Zhong:2023:LSM

- [1478] Wenhui Zhong, Guanggan Chen, and Yuanyuan Zhang. Limit stationary measures of the stochastic magnetohydrodynamic system in a 3D thin domain. *Journal of Mathematical Physics*, 64(7):072702, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/072702/2900792/Limit-stationary-measures-of-the-stochastic>.

Brugues:2023:CSS

- [1479] Joaquim Brugués, Sonja Hohloch, Pau Mir, and Eva Miranda. Constructions of b -semitoric systems. *Journal of Mathematical Physics*, 64(7):072703, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/072703/2903246/Constructions-of-b-semitoric-systems>.

McCarney:2023:EIW

- [1480] Jordan McCarney. Exact internal waves in the presence of mean currents and rotation. *Journal of Mathematical Physics*, 64(7):073101, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/073101/2902963/Exact-internal-waves-in-the-presence-of-mean>.

Beard:2023:EOT

- [1481] K. Beard, A. Stefan, Jr. R. Viator, and A. Welters. Effective operators and their variational principles for discrete electrical network problems. *Journal of Mathematical Physics*, 64(7):073501, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/073501/2900793/Effective-operators-and-their-variational>.

Aktosun:2023:MMS

- [1482] Tuncay Aktosun, Ramazan Ercan, and Mehmet Unlu. The Marchenko method to solve the general system of derivative nonlinear Schrödinger equations. *Journal of Mathematical Physics*, 64(7):073502, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/073502/2901405/The-Marchenko-method-to-solve-the-general-system>.

Bailey:2023:IGC

- [1483] Michael Bailey and Marco Gualtieri. Integration of generalized complex structures. *Journal of Mathematical Physics*, 64(7):073503, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/073503/2901947/Integration-of-generalized-complex-structures>.

Boggarapu:2023:TFA

- [1484] Pradeep Boggarapu, Hatem Mejjaoli, Shyam Swarup Mondal, and P. Jitendra Kumar Senapati. Time-frequency analysis of (k, a) -generalized wavelet transform and applications. *Journal of Mathematical Physics*, 64(7):073504, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/073504/2902664/Time-frequency-analysis-of-k-a-generalized-wavelet>.

Melong:2023:GHV

- [1485] Fridolin Melong and Raimar Wulkenhaar. Generalized Heisenberg–Virasoro algebra and matrix models from quantum algebra. *Journal of Mathematical Physics*, 64(7):073505, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/073505/2903076/Generalized-Heisenberg-Virasoro-algebra-and-matrix>.

Raymond:2023:MQC

- [1486] Nicolas Raymond and Éric Soccorsi. Magnetic quantum currents in the presence of a Neumann wall. *Journal of Mathematical Physics*, 64(7):073506, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/073506/2903822/Magnetic-quantum-currents-in-the-presence-of-a>.

Seo:2023:EQR

- [1487] Yuki Seo. Erratum: The quantum \mathfrak{h}_α -Rényi divergence of real order, [J. Math. Phys. **63**, 072203 (2022)]. *Journal of Mathematical Physics*, 64(7):079901, July 28, 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/7/079901/2900794/Erratum-The-quantum-Renyi-divergence-of-real-order>. See [1082].

Rong:2023:NSM

- [1488] Ting Rong and Fuyi Li. Normalized solutions to the mass supercritical Kirchhoff-type equation with non-trapping potential. *Journal of Mathematical Physics*, 64(8):081501, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/081501/2905675/Normalized-solutions-to-the-mass-supercritical>.

Zhang:2023:CRP

- [1489] Minyi Zhang and Changjiang Zhu. Convergence rates to the planar stationary solution to a 2D model of the radiating gas on half space. *Journal of Mathematical Physics*, 64(8):081502, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/081502/2905820/Convergence-rates-to-the-planar-stationary>.

Hakkaev:2023:SSP

- [1490] Sevdzhan Hakkaev, Milena Stanislavova, and Atanas G. Stefanov. Spectral stability of periodic waves for the Zakharov system. *Journal of Mathematical Physics*, 64(8):081503, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/081503/2906249/Spectral-stability-of-periodic-waves-for-the>.

Liu:2023:PMF

- [1491] Lintao Liu, Kaimin Teng, Jie Yang, and Haibo Chen. Properties of minimizers for the fractional Kirchhoff energy functional. *Journal of Math-*

ematical Physics, 64(8):081504, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/081504/2906532/Properties-of-minimizers-for-the-fractional>.

Sato:2023:NIT

- [1492] Naoki Sato and Michio Yamada. Nested invariant tori foliating a vector field and its curl: Toward MHD equilibria and steady Euler flows in toroidal domains without continuous Euclidean isometries. *Journal of Mathematical Physics*, 64(8):081505, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/081505/2906531/Nested-invariant-tori-foliating-a-vector-field-and>.

Liu:2023:GSS

- [1493] Yu Liu, Song Meng, Jiayan Wu, and Ting Zhang. Global strong solutions for the multi-dimensional compressible viscoelastic flows with general pressure law. *Journal of Mathematical Physics*, 64(8):081506, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/081506/2906533/Global-strong-solutions-for-the-multi-dimensional>.

Fang:2023:TSS

- [1494] Beixiang Fang, Piye Sun, and Qin Zhao. Transonic shocks for 2D steady exothermically reacting Euler flows in a finite nozzle. *Journal of Mathematical Physics*, 64(8):081507, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/081507/2907011/Transonic-shocks-for-2D-steady-exothermically>.

Li:2023:SSR

- [1495] Zhi Li and Wenqiang Zhao. Stability of stochastic reaction-diffusion equation under random influences in high regular spaces. *Journal of Mathematical Physics*, 64(8):081508, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/081508/2907215/Stability-of-stochastic-reaction-diffusion>.

Dinh:2023:LTD

- [1496] Van Duong Dinh, Mohamed Majdoub, and Tarek Saanouni. Long time dynamics and blow-up for the focusing inhomogeneous nonlinear Schrödinger equation with spatially growing nonlinearity. *Journal*

of *Mathematical Physics*, 64(8):081509, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/081509/2907140/Long-time-dynamics-and-blow-up-for-the-focusing>.

Chtioui:2023:CDO

- [1497] Taoufik Chtioui, Atef Hajjaji, Sami Mabrouk, and Abdenacer Makhoulouf. Cohomologies and deformations of O -operators on Lie triple systems. *Journal of Mathematical Physics*, 64(8):081701, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/081701/2905824/Cohomologies-and-deformations-of-O-operators-on>.

Primc:2023:CRA

- [1498] Mirko Primc and Tomislav Sikić. Combinatorial relations among relations for level 2 standard $C_n(1)$ -modules. *Journal of Mathematical Physics*, 64(8):081702, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/081702/2906534/Combinatorial-relations-among-relations-for-level>.

Algethami:2023:QSC

- [1499] Dakhilallah Algethami and Andrey Mudrov. Quantum symmetric conjugacy classes of non-exceptional groups. *Journal of Mathematical Physics*, 64(8):081703, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/081703/2907578/Quantum-symmetric-conjugacy-classes-of-non>.

Poletaeva:2023:LMS

- [1500] Elena Poletaeva. On linked modules over the super-Yangian of the superalgebra $Q(1)$. *Journal of Mathematical Physics*, 64(8):081704, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/081704/2908458/On-linked-modules-over-the-super-Yangian-of-the>.

Schulz-Baldes:2023:SLS

- [1501] Hermann Schulz-Baldes and Tom Stoiber. Spectral localization for semimetals and callias operators. *Journal of Mathematical Physics*, 64(8):081901, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/>

article/64/8/081901/2905837/Spectral-localization-for-semimetals-
and-Callias.

Shapiro:2023:ILD

- [1502] Jacob Shapiro. Incomplete localization for disordered chiral strips. *Journal of Mathematical Physics*, 64(8):081902, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/081902/2906398/Incomplete-localization-for-disordered-chiral>.

Nessi:2023:DSP

- [1503] Nicolás Nessi and Lucas Sourrouille. Dynamic and static properties of quantum Hall and harmonic oscillator systems on the non-commutative plane. *Journal of Mathematical Physics*, 64(8):081903, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/081903/2906701/Dynamic-and-static-properties-of-quantum-Hall-and>.

Sorokanich:2023:BMF

- [1504] Stephen Sorokanich. Beyond mean-field: Condensate coupled with pair excitations. *Journal of Mathematical Physics*, 64(8):081904, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/081904/2907736/Beyond-mean-field-Condensate-coupled-with-pair>.

Yang:2023:ESC

- [1505] Wei Yang. Exactly solvable complex \mathcal{PT} symmetry potential $A[\operatorname{sech}(\lambda x) + i \tanh(\lambda x)]$. *Journal of Mathematical Physics*, 64(8):082101, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/082101/2905677/Exactly-solvable-complex-PT-symmetry-potential-A>.

Cerjan:2023:SLL

- [1506] Alexander Cerjan, Lars Koekenbier, and Hermann Schulz-Baldes. Spectral localizer for line-gapped non-Hermitian systems. *Journal of Mathematical Physics*, 64(8):082102, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/082102/2905836/Spectral-localizer-for-line-gapped-non-Hermitian>.

Anapolitanos:2023:VWI

- [1507] Ioannis Anapolitanos, Mariam Badalyan, and Dirk Hundertmark. On the van der Waals interaction between a molecule and a half-infinite plate. *Journal of Mathematical Physics*, 64(8):082103, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/082103/2906564/On-the-van-der-Waals-interaction-between-a>.

Pathirana:2023:LLN

- [1508] Lubashan Pathirana and Jeffrey Schenker. Law of large numbers and central limit theorem for ergodic quantum processes. *Journal of Mathematical Physics*, 64(8):082201, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/082201/2908509/Law-of-large-numbers-and-central-limit-theorem-for>.

Anco:2023:ALR

- [1509] Stephen C. Anco and Jordan A. Fazio. Analog of a Laplace–Runge–Lenz vector for particle orbits (time-like geodesics) in Schwarzschild spacetime. *Journal of Mathematical Physics*, 64(8):082501, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/082501/2906622/Analog-of-a-Laplace-Runge--Lenz-vector-for-particle>.

Gasperin:2023:SFN

- [1510] Edgar Gasperín and Rafael Pinto. Spin-0 fields and the NP-constants close to spatial infinity in Minkowski spacetime. *Journal of Mathematical Physics*, 64(8):082502, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/082502/2906567/Spin-0-fields-and-the-NP-constants-close-to>.

Martin:2023:SAH

- [1511] Daniel Martin. Staticity of asymptotically hyperbolic minimal mass extensions. *Journal of Mathematical Physics*, 64(8):082503, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/082503/2906706/Staticity-of-asymptotically-hyperbolic-minimal>.

Blitz:2023:TCC

- [1512] Samuel Blitz. Toward a classification of conformal hypersurface invariants. *Journal of Mathematical Physics*, 64(8):082504, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/082504/2907617/Toward-a-classification-of-conformal-hypersurface>.

Bohmer:2023:MGU

- [1513] Christian G. Böhmer and Erik Jensko. Modified gravity: a unified approach to metric-affine models. *Journal of Mathematical Physics*, 64(8):082505, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/082505/2908161/Modified-gravity-A-unified-approach-to-metric>.

Wang:2023:DVP

- [1514] Yunping Wang and Ercai Chen. Double variational principle for mean dimensions with sub-additive potentials. *Journal of Mathematical Physics*, 64(8):082701, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/082701/2905676/Double-variational-principle-for-mean-dimensions>.

Moor:2023:PHR

- [1515] Joris De Moor, Florian Dorsch, and Hermann Schulz-Baldes. Partially hyperbolic random dynamics on Grassmannians. *Journal of Mathematical Physics*, 64(8):082702, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/082702/2907125/Partially-hyperbolic-random-dynamics-on>.

Pu:2023:DNA

- [1516] Zhe Pu and Dingshi Li. Dynamics of the non-autonomous stochastic p -Laplacian parabolic problems on unbounded thin domains. *Journal of Mathematical Physics*, 64(8):082703, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/082703/2907795/Dynamics-of-the-non-autonomous-stochastic-p>.

Hohloch:2023:PVD

- [1517] S. Hohloch and G. Muareem. Point vortex dynamics on Kähler twistor spaces. *Journal of Mathematical Physics*, 64(8):082901, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic).

(electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/082901/2905839/Point-vortex-dynamics-on-Kahler-twistor-spaces>.

Aydin:2023:BLO

- [1518] Cengiz Aydin. From Babylonian lunar observations to Floquet multipliers and Conley–Zehnder indices. *Journal of Mathematical Physics*, 64(8):082902, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/082902/2906705/From-Babylonian-lunar-observations-to-Floquet>.

Knauf:2023:MCC

- [1519] Andreas Knauf. Mini-course: Classical mechanics and transport. *Journal of Mathematical Physics*, 64(8):082903, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/082903/2908273/Mini-course-Classical-mechanics-and-transport>.

Imamura:2023:NAK

- [1520] Takashi Imamura, Matteo Mucciconi, and Tomohiro Sasamoto. New approach to KPZ models through free fermions at positive temperature. *Journal of Mathematical Physics*, 64(8):083301, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/083301/2908272/New-approach-to-KPZ-models-through-free-fermions>.

Yu:2023:PVC

- [1521] Jianduo Yu, Siqi Chen, Chuanzhong Li, Mengkun Zhu, and Yang Chen. Painlevé V and confluent Heun equations associated with a perturbed Gaussian unitary ensemble. *Journal of Mathematical Physics*, 64(8):083501, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/083501/2905678/Painleve-V-and-confluent-Heun-equations-associated>.

Bertola:2023:HSR

- [1522] M. Bertola, J. Harnad, and J. Hurtubise. Hamiltonian structure of rational isomonodromic deformation systems. *Journal of Mathematical Physics*, 64(8):083502, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/083502/2905679/Hamiltonian-structure-of-rational-isomonodromic>.

Min:2023:HDO

- [1523] Chao Min and Yang Chen. Hankel determinant and orthogonal polynomials for a perturbed Gaussian weight: From finite n to large n asymptotics. *Journal of Mathematical Physics*, 64(8):083503, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/083503/2906702/Hankel-determinant-and-orthogonal-polynomials-for>.

Eom:2023:EPT

- [1524] J. Y. Eom, M. Machida, G. Nakamura, G. Nishimura, and C. L. Sun. Expressions of the peak time for time-domain boundary measurements of diffuse light. *Journal of Mathematical Physics*, 64(8):083504, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/083504/2906703/Expressions-of-the-peak-time-for-time-domain>.

Tadano:2023:IOE

- [1525] Homare Tadano. Improved oscillation estimates and the Hitchin-Thorpe inequality on compact Ricci solitons. *Journal of Mathematical Physics*, 64(8):083505, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/083505/2907141/Improved-oscillation-estimates-and-the-Hitchin>.

Nittis:2023:ANE

- [1526] Giuseppe De Nittis and Danilo Polo Ojito. About the notion of eigenstates for C^* -algebras and some application in quantum mechanics. *Journal of Mathematical Physics*, 64(8):083506, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/083506/2907390/About-the-notion-of-eigenstates-for-C-algebras-and>.

Wang:2023:SLS

- [1527] Dan Wang, Mengkun Zhu, and Yang Chen. A singular linear statistic for a perturbed LUE and the Hankel matrices. *Journal of Mathematical Physics*, 64(8):083507, August 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/8/083507/2908163/A-singular-linear-statistic-for-a-perturbed-LUE>.

Cavalcanti:2023:EDE

- [1528] Marcelo M. Cavalcanti, Wellington J. Corrêa, and Valéria Neves Domingos Cavalcanti. Exponential decay estimates for the damped defocusing Schrödinger equation in exterior domains. *Journal of Mathematical Physics*, 64(10):101501, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/101501/2913905/Exponential-decay-estimates-for-the-damped>.

Kim:2023:EIM

- [1529] Jae-Myoung Kim, Soo-Oh Yang, and Jung-Hyun Bae. Existence of infinitely many weak solutions to Kirchhoff–Schrödinger–Poisson systems and related models. *Journal of Mathematical Physics*, 64(10):101502, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/101502/2913904/Existence-of-infinitely-many-weak-solutions-to>.

Aouadi:2023:RPE

- [1530] Moncef Aouadi. Robustness of pullback and exponential pullback attractors for thermoelastic plate with p -Laplacian. *Journal of Mathematical Physics*, 64(10):101503, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/101503/2913995/Robustness-of-pullback-and-exponential-pullback>.

Kopylova:2023:ASS

- [1531] E. A. Kopylova and A. I. Komech. On asymptotic stability of solitons for 2D Maxwell–Lorentz equations. *Journal of Mathematical Physics*, 64(10):101504, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/101504/2914102/On-asymptotic-stability-of-solitons-for-2D-Maxwell>.

Adler:2023:NAR

- [1532] V. E. Adler and M. P. Kolesnikov. Non-autonomous reductions of the KdV equation and multi-component analogs of the Painlevé equations P_{34} and P_3 . *Journal of Mathematical Physics*, 64(10):101505, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/101505/2914674/Non-autonomous-reductions-of-the-KdV-equation-and>.

Colin:2023:SSW

- [1533] Mathieu Colin and Tatsuya Watanabe. Stable standing waves for a Schrödinger system with nonlinear χ^3 response. *Journal of Mathematical Physics*, 64(10):101506, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/101506/2916107/Stable-standing-waves-for-a-Schrodinger-system>.

Liu:2023:PSN

- [1534] Jiu Liu, Yu Duan, Jia-Feng Liao, and Hui-Lan Pan. Positive solutions for a non-autonomous Schrödinger–Bopp–Podolsky system. *Journal of Mathematical Physics*, 64(10):101507, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/101507/2916119/Positive-solutions-for-a-non-autonomous>.

Lu:2023:EST

- [1535] Hui Lu and Dan Wu. Existence and stability of traveling waves for semi-relativistic Schrödinger equations with van der Waals-type potentials. *Journal of Mathematical Physics*, 64(10):101508, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/101508/2916213/Existence-and-stability-of-traveling-waves-for->

Meng:2023:EUG

- [1536] Zhiying Meng and Zhaoyang Yin. Existence and uniqueness of the globally conservative solutions for a weakly dissipative Camassa–Holm equation in time weighted $H^1(\mathbb{R})$ space. *Journal of Mathematical Physics*, 64(10):101509, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/101509/2917446/Existence-and-uniqueness-of-the-globally>.

Zwart:2023:MCE

- [1537] Kevin Zwart. On the Mathieu conjecture for $SU(N)$ and $SO(N)$. *Journal of Mathematical Physics*, 64(10):101701, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/101701/2913908/On-the-Mathieu-conjecture-for-SU-N-and-SO-N>.

Bobrova:2023:DLN

- [1538] I. A. Bobrova. Different linearizations of non-abelian second Painlevé systems and related monodromy surfaces. *Journal of Mathematical Physics*,

64(10):101702, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/101702/2915717/Different-linearizations-of-non-abelian-second>.

Fan:2023:DOR

- [1539] Zhaobing Fan, Jicheng Geng, and Shaolong Han. Differential operator realization of braid group action on i quantum groups. *Journal of Mathematical Physics*, 64(10):101703, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/101703/2916706/Differential-operator-realization-of-braid-group>.

Korepanov:2023:SSC

- [1540] Igor G. Korepanov. Self-similarity in cubic blocks of \mathcal{R} -operators. *Journal of Mathematical Physics*, 64(10):101704, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/101704/2916707/Self-similarity-in-cubic-blocks-of-R-operators>.

Zhang:2023:RBF

- [1541] Yuanyuan Zhang, Jun Zhao, and Genqiang Liu. Rota–Baxter family Ω -associative conformal algebras and their cohomology theory. *Journal of Mathematical Physics*, 64(10):101705, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/101705/2918354/Rota--Baxter-family-associative-conformal-algebras>.

Amore:2023:QPS

- [1542] Paolo Amore, Francisco M. Fernández, and José Luis Valdez. Quantum particles in a suddenly accelerating potential. *Journal of Mathematical Physics*, 64(10):102101, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/102101/2918221/Quantum-particles-in-a-suddenly-accelerating>.

Amorim:2023:SAR

- [1543] Rafael T. Amorim and Alessandra A. Verri. Spectral analysis on ruled surfaces with combined Dirichlet and Neumann boundary conditions. *Journal of Mathematical Physics*, 64(10):102102, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/102102/2918328/Spectral-analysis-on-ruled-surfaces-with-combined>.

Hasler:2023:DAS

- [1544] D. Hasler and C. Lejsek. On dilation analyticity and spatial exponential decay of atomic ground states in non-relativistic QED. *Journal of Mathematical Physics*, 64(10):102103, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/102103/2918333/On-dilation-analyticity-and-spatial-exponential>.

Hiai:2023:ECM

- [1545] Fumio Hiai. Equality cases in monotonicity of quasi-entropies, Lieb's concavity and Ando's convexity. *Journal of Mathematical Physics*, 64(10):102201, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/102201/2916109/Equality-cases-in-monotonicity-of-quasi-entropies>.

Han:2023:CMR

- [1546] Kyung Hoon Han and Seung-Hyeok Kye. Choi matrices revisited. II. *Journal of Mathematical Physics*, 64(10):102202, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/102202/2916185/Choi-matrices-revisited-II>.

Cowtan:2023:AAB

- [1547] Alexander Cowtan and Shahn Majid. Algebraic aspects of boundaries in the Kitaev quantum double model. *Journal of Mathematical Physics*, 64(10):102203, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/102203/2917002/Algebraic-aspects-of-boundaries-in-the-Kitaev>.

Wallick:2023:AQF

- [1548] Daniel Wallick. An algebraic quantum field theoretic approach to toric code with gapped boundary. *Journal of Mathematical Physics*, 64(10):102301, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/102301/2915142/An-algebraic-quantum-field-theoretic-approach-to>.

Mondal:2023:LWP

- [1549] Puskar Mondal. Local well-posedness of the Einstein–Yang–Mills system in constant mean extrinsic curvature spatial harmonic generalized

Coulomb gauge. *Journal of Mathematical Physics*, 64(10):102501, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/102501/2913910/Local-well-posedness-of-the-Einstein--Yang--Mills>.

Normann:2023:HRW

- [1550] M. Normann. Hyperbolic reduction of the Weyl–Lanczos equations. *Journal of Mathematical Physics*, 64(10):102502, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/102502/2916112/Hyperbolic-reduction-of-the-Weyl--Lanczos-equations>.

delaFuente:2023:OET

- [1551] Daniel de la Fuente, Rafael M. Rubio, and Juan J. Salamanca. Obstructions to the existence of trapped submanifolds in relativistic spacetimes. *Journal of Mathematical Physics*, 64(10):102503, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/102503/2916212/Obstructions-to-the-existence-of-trapped>.

Chrusciel:2023:HCL

- [1552] Piotr T. Chru’sciel and Tomasz Smolka. Hamiltonian charges on light cones for linear field theories on (A)dS backgrounds. *Journal of Mathematical Physics*, 64(10):102504, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/102504/2918335/Hamiltonian-charges-on-light-cones-for-linear>.

Wang:2023:DOT

- [1553] Jian Wang, Yong Wang, and Tong Wu. Dirac operators with torsion, spectral Einstein functionals and the noncommutative residue. *Journal of Mathematical Physics*, 64(10):102505, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/102505/2918336/Dirac-operators-with-torsion-spectral-Einstein>.

Coley:2023:SHT

- [1554] A. A. Coley and R. J. van den Hoogen. Spatially homogeneous teleparallel gravity: Bianchi I. *Journal of Mathematical Physics*, 64(10):102506, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/102506/2918421/Spatially-homogeneous-teleparallel-gravity-Bianchi>.

Wang:2023:DMV

- [1555] Fengling Wang, Tomás Caraballo, and Yangrong Li. Dynamics of multi-valued retarded p -Laplace equations driven by nonlinear colored noise. *Journal of Mathematical Physics*, 64(10):102701, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/102701/2918222/Dynamics-of-multi-valued-retarded-p-Laplace>.

Yao:2023:PSC

- [1556] Yuan Yao. Phase spaces that cannot be cloned in classical mechanics. *Journal of Mathematical Physics*, 64(10):102901, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/102901/2914681/Phase-spaces-that-cannot-be-cloned-in-classical>.

Massa:2023:HVP

- [1557] Enrico Massa and Enrico Pagani. On the Herglotz variational problem. *Journal of Mathematical Physics*, 64(10):102902, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/102902/2918605/On-the-Herglotz-variational-problem>.

Liu:2023:STB

- [1558] Mengqian Liu and Zhigang Wu. Space-time behavior of the compressible Navier–Stokes equations with hyperbolic heat conduction. *Journal of Mathematical Physics*, 64(10):103101, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/103101/2914212/Space-time-behavior-of-the-compressible-Navier>.**]**

Wittmann:2023:GGC

- [1559] René Wittmann, Sabine Jansen, and Hartmut Löwen. Generalized geometric criteria for the absence of effective many-body interactions in the Asakura-Oosawa model. *Journal of Mathematical Physics*, 64(10):103301, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/103301/2915718/Generalized-geometric-criteria-for-the-absence-of>.

Zhang:2023:PTP

- [1560] Ping Zhang, Wen-Du Li, Tong Liu, and Wu-Sheng Dai. Probability thermodynamics and probability quantum field. *Journal of Mathematical*

Physics, 64(10):103302, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/103302/2918164/Probability-thermodynamics-and-probability-quantum>.

Guo:2023:DTM

- [1561] Weici Guo, Mengyao Chen, Yi Yang, and Jipeng Cheng. Darboux transformations of the modified BKP hierarchy by fermionic approach. *Journal of Mathematical Physics*, 64(10):103501, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/103501/2914214/Darboux-transformations-of-the-modified-BKP>.

Pu:2023:DTP

- [1562] Jun-Cai Pu and Yong Chen. Double and triple-pole solutions for the third-order flow equation of the Kaup–Newell system with zero/nonzero boundary conditions. *Journal of Mathematical Physics*, 64(10):103502, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/103502/2914215/Double-and-triple-pole-solutions-for-the-third>.

Harland:2023:SCM

- [1563] Derek Harland, Paul Leask, and Martin Speight. Skyrme crystals with massive pions. *Journal of Mathematical Physics*, 64(10):103503, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/103503/2914216/Skyrme-crystals-with-massive-pions>.

Wang:2023:CME

- [1564] Zhaoyu Wang, Kai Xu, and Engui Fan. The complex MKDV equation with step-like initial data: Large time asymptotic analysis. *Journal of Mathematical Physics*, 64(10):103504, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/103504/2914678/The-complex-MKDV-equation-with-step-like-initial>.

Vergallo:2023:HSJ

- [1565] P. Vergallo and E. V. Ferapontov. Hamiltonian systems of Jordan block type: Delta-functional reductions of the kinetic equation for soliton gas. *Journal of Mathematical Physics*, 64(10):103505, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-

7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/103505/2916705/Hamiltonian-systems-of-Jordan-block-type-Delta>.

Yue:2023:APS

- [1566] Hongge Yue, Yong Xu, Ruifang Wang, and Zhe Jiao. Averaging principle of stochastic Burgers equation driven by Lévy processes. *Journal of Mathematical Physics*, 64(10):103506, October 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/10/103506/2918220/Averaging-principle-of-stochastic-Burgers-equation>.

Achatz:2023:MSD

- [1567] U. Achatz, Y.-H. Kim, and G. S. Voelker. Multi-scale dynamics of the interaction between waves and mean flows: From nonlinear WKB theory to gravity-wave parameterizations in weather and climate models. *Journal of Mathematical Physics*, 64(11):111101, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/111101/2919302/Multi-scale-dynamics-of-the-interaction-between>.

Galdi:2023:MPC

- [1568] G. P. Galdi, V. Mácha, S. Necasová, and B. She. On the motion of a pendulum with a cavity filled with a compressible fluid. *Journal of Mathematical Physics*, 64(11):111501, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/111501/2919305/On-the-motion-of-a-pendulum-with-a-cavity-filled>.

Wu:2023:NUD

- [1569] Wanping Wu and Yinghui Zhang. Non-uniform decay of solutions to the incompressible magneto-micropolar fluids with/without magnetic diffusion and spin viscosity. *Journal of Mathematical Physics*, 64(11):111502, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/111502/2919304/Non-uniform-decay-of-solutions-to-the>.

Missaoui:2023:SCS

- [1570] Hlel Missaoui and Anouar Bahrouni. Sign-changing solution for a generalized Kirchhoff problem in the fractional Orlicz–Sobolev space with non-smooth nonlinearity. *Journal of Mathematical Physics*, 64(11):111503, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/>

11/111503/2919523/Sign-changing-solution-for-a-generalized-Kirchhoff.

Fiscella:2023:NMM

- [1571] A. Fiscella, P. K. Mishra, and V. M. Tripathi. Nehari manifold method for singular double phase problem with optimal control on parameter. *Journal of Mathematical Physics*, 64(11):111504, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/111504/2919310/Nehari-manifold-method-for-singular-double-phase>.

Han:2023:EGQ

- [1572] Xiaosen Han and Guange Su. Existence of $U(1)$ gauged q-balls for a field model with sixth-order potential. *Journal of Mathematical Physics*, 64(11):111505, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/111505/2919311/Existence-of-U-1-gauged-Q-balls-for-a-field-model>.

Cao:2023:GCS

- [1573] Yuebo Cao. Global classical solutions to the compressible Navier–Stokes equations with Navier-type slip boundary condition in 2D bounded domains. *Journal of Mathematical Physics*, 64(11):111506, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/111506/2919553/Global-classical-solutions-to-the-compressible>.

Ayechi:2023:SSE

- [1574] Radhia Ayechi, Ilhem Boukhris, and Julien Royer. A system of Schrödinger equations in a wave guide. *Journal of Mathematical Physics*, 64(11):111507, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/111507/2920299/A-system-of-Schrodinger-equations-in-a-wave-guide>.

Zheng:2023:SIM

- [1575] Yiming Zheng and Yi Zhu. Stability of 2D inviscid MHD equations with only vertical magnetic diffusion on T^2 . *Journal of Mathematical Physics*, 64(11):111508, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/111508/2921042/Stability-of-2D-inviscid-MHD-equations-with-only>.

Zhou:2023:GWP

- [1576] Ling Zhou and Chun-Lei Tang. Global well-posedness to the 3D Cauchy problem of nonhomogeneous Navier–Stokes equations with density-dependent viscosity and large initial velocity. *Journal of Mathematical Physics*, 64(11):111509, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/111509/2921441/Global-well-posedness-to-the-3D-Cauchy-problem-of>.

Zhang:2023:SST

- [1577] Na Zhang. Smooth symmetric transonic isothermal flows with nonzero angular velocity. *Journal of Mathematical Physics*, 64(11):111510, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/111510/2922151/Smooth-symmetric-transonic-isothermal-flows-with>.

Wang:2023:BRA

- [1578] Na Wang, Can Zhang, and Ke Wu. 3D boson representation of affine Yangian of $\mathfrak{gl}(1)$ and 3D cut-and-join operators. *Journal of Mathematical Physics*, 64(11):111701, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/111701/2920301/3D-boson-representation-of-affine-Yangian-of-gl-1>.

Crampe:2023:MEE

- [1579] Nicolas Crampé, Julien Gaboriaud, Loïc Poulain d’Andecy, and Luc Vinet. Matrix elements of $SO(3)$ in sl_3 representations as bispectral multivariate functions. *Journal of Mathematical Physics*, 64(11):111702, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/111702/2925208/Matrix-elements-of-SO-3-in-sl3-representations-as>.

Yang:2023:FBH

- [1580] Mengxuan Yang. Flat bands and high Chern numbers in twisted multilayer graphene. *Journal of Mathematical Physics*, 64(11):111901, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/111901/2919309/Flat-bands-and-high-Chern-numbers-in-twisted>.

Hahn:2023:WNSb

- [1581] Nico Hahn, Mario Kieburg, Omri Gat, and Thomas Guhr. Winding number statistics for chiral random matrices: Averaging ratios of parametric determinants in the orthogonal case. *Journal of Mathematical Physics*, 64(11):111902, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/111902/2919308/Winding-number-statistics-for-chiral-random>.

Kraisler:2023:KET

- [1582] Joseph Kraisler and John C. Schotland. Kinetic equations for two-photon light in random media. *Journal of Mathematical Physics*, 64(11):111903, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/111903/2919318/Kinetic-equations-for-two-photon-light-in-random>.

delaFuente:2023:BBA

- [1583] Julio C. Magdalena de la Fuente, Jens Eisert, and Andreas Bauer. Bulk-to-boundary anyon fusion from microscopic models. *Journal of Mathematical Physics*, 64(11):111904, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/111904/2920895/Bulk-to-boundary-anyon-fusion-from-microscopic>.

Matos:2023:LRC

- [1584] Rodrigo Matos. On the localization regime of certain random operators within Hartree–Fock theory. *Journal of Mathematical Physics*, 64(11):112101, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/112101/2919317/On-the-localization-regime-of-certain-random>.

Alhaidari:2023:SSP

- [1585] A. D. Alhaidari and M. E. H. Ismail. Solutions of the scattering problem in a complete set of Bessel functions with a discrete index. *Journal of Mathematical Physics*, 64(11):112102, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/112102/2921040/Solutions-of-the-scattering-problem-in-a-complete>.

West:2023:PNI

- [1586] Matthew West. A pair of non-isometric potentials with the same semi-classical invariants. *Journal of Mathematical Physics*, 64(11):112103, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/112103/2922176/A-pair-of-non-isometric-potentials-with-the-same>.

Shirokov:2023:CMQ

- [1587] M. E. Shirokov. Correlation measures of a quantum state and information characteristics of a quantum channel. *Journal of Mathematical Physics*, 64(11):112201, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/112201/2921041/Correlation-measures-of-a-quantum-state-and>.

Mondal:2023:BBL

- [1588] Puskar Mondal. Big-bang limit of $2 + 1$ gravity and Thurston boundary of Teichmüller space. *Journal of Mathematical Physics*, 64(11):112501, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/112501/2919316/Big-bang-limit-of-2-1-gravity-and-Thurston>.

Morand:2023:PAK

- [1589] Kevin Morand. Possible ambient kinematics. *Journal of Mathematical Physics*, 64(11):112502, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/112502/2921600/Possible-ambient-kinematics>.

Caraballo:2023:NDA

- [1590] Tomás Caraballo, Alexandre N. Carvalho, and Heraclio López-Lázaro. Nonlinear dynamical analysis for globally modified incompressible non-Newtonian fluids. *Journal of Mathematical Physics*, 64(11):112701, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/112701/2919323/Nonlinear-dynamical-analysis-for-globally-modified>.

Campanino:2023:UBE

- [1591] Massimo Campanino. Uniform bound of the entanglement for the ground state of the one-dimensional quantum Ising model with non-homogeneous transverse field. *Journal of Mathematical Physics*, 64(11):113301,

November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/113301/2923283/Uniform-bound-of-the-entanglement-for-the-ground>.

Thuillier:2023:BFM

- [1592] F. Thuillier. The $U(1)$ BF functional measure and the Dirac distribution on the space of quantum fields. *Journal of Mathematical Physics*, 64(11):113501, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/113501/2919324/The-U-1-BF-functional-measure-and-the-Dirac>.

Bradley:2023:HSA

- [1593] Patrick Erik Bradley and Ángel Morán Ledezma. Hearing shapes via p -adic Laplacians. *Journal of Mathematical Physics*, 64(11):113502, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/113502/2919928/Hearing-shapes-via-p-adic-Laplacians>.

Banerjee:2023:SLE

- [1594] R. Banerjee and M. Niedermaier. States of low energy on Bianchi I spacetimes. *Journal of Mathematical Physics*, 64(11):113503, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/113503/2920300/States-of-Low-Energy-on-Bianchi-I-spacetimes>.

Kuchment:2023:AAP

- [1595] Peter Kuchment. Analytic and algebraic properties of dispersion relations (Bloch varieties) and Fermi surfaces. What is known and unknown. *Journal of Mathematical Physics*, 64(11):113504, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/113504/2921575/Analytic-and-algebraic-properties-of-dispersion>. ■

Nikitin:2023:SQM

- [1596] A. G. Nikitin. Superintegrable quantum mechanical systems with position dependent masses invariant with respect to three parametric Lie groups. *Journal of Mathematical Physics*, 64(11):113505, November 2023. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/64/11/113505/2924933/Superintegrable-quantum-mechanical-systems-with>. ■

Liao:2024:GSS

- [1597] Jing Liao and Zhong Tan. Global stability of supersonic Euler flows in quasi-one-dimensional convergent nozzles. *Journal of Mathematical Physics*, 65(1):011501, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/011501/2932235/Global-stability-of-supersonic-Euler-flows-in>.

Kachkovskiy:2024:SQS

- [1598] Ilya Kachkovskiy, Wencai Liu, and Wei-Min Wang. Spacetime quasiperiodic solutions to a nonlinear Schrödinger equation on \mathbb{Z} . *Journal of Mathematical Physics*, 65(1):011502, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/011502/2932238/Spacetime-quasiperiodic-solutions-to-a-nonlinear>.

Wang:2024:DBA

- [1599] Chang-Jian Wang, Zi-Han Zheng, and Xin-Cai Zhu. Dynamic behavior analysis to a generalized chemotaxis-consumption system. *Journal of Mathematical Physics*, 65(1):011503, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/011503/2932293/Dynamic-behavior-analysis-to-a-generalized>.

Han:2024:GWP

- [1600] Bin Han, Ke Hu, and Ning-An Lai. On the global well-posedness for the compressible Hall-MHD system. *Journal of Mathematical Physics*, 65(1):011504, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/011504/3044920/On-the-global-well-posedness-for-the-compressible>.

Caro:2024:IPD

- [1601] Pedro Caro and Alberto Ruiz. An inverse problem for data-driven prediction in quantum mechanics. *Journal of Mathematical Physics*, 65(1):011505, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/011505/3061439/An-inverse-problem-for-data-driven-prediction-in>.

Cheng:2024:EMR

- [1602] Yu Cheng and Zhanbing Bai. Existence and multiplicity results for parameter Kirchhoff double phase problem with Hardy-Sobolev

exponents. *Journal of Mathematical Physics*, 65(1):011506, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/011506/3150155/Existence-and-multiplicity-results-for-parameter>.

Zhu:2024:SMT

- [1603] Xiaoyu Zhu. Simple modules over the Takiff Lie algebra for \int_2 . *Journal of Mathematical Physics*, 65(1):011701, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/011701/3249987/Simple-modules-over-the-Takiff-Lie-algebra-for-s12>.

Wu:2024:DFM

- [1604] Yemo Wu and Dafeng Zuo. Dubrovin-Frobenius manifold structures on the orbit space of the symmetric group. *Journal of Mathematical Physics*, 65(1):011702, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/011702/3253616/Dubrovin-Frobenius-manifold-structures-on-the>.

Beggs:2024:QGQ

- [1605] Edwin Beggs and Shahn Majid. Quantum geodesics in quantum mechanics. *Journal of Mathematical Physics*, 65(1):012101, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/012101/2932475/Quantum-geodesics-in-quantum-mechanics>.

deOliveira:2024:DCS

- [1606] C. R. de Oliveira and R. G. Romano. Dynamical confinement for Schrödinger operators with magnetic potential and Aharonov-Bohm effect. *Journal of Mathematical Physics*, 65(1):012102, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/012102/2932865/Dynamical-confinement-for-Schrodinger-operators>.

Macera:2024:NLA

- [1607] Davide Macera. Non-Lyapunov annealed decay for 1d Anderson eigenfunctions. *Journal of Mathematical Physics*, 65(1):012103, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/012103/2932932/Non-Lyapunov-annealed-decay-for-1d-Anderson>.

Curtright:2024:MSS

- [1608] Thomas Curtright. Mean sinc sums and scale invariant scattering. *Journal of Mathematical Physics*, 65(1):012104, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/012104/2932912/Mean-sinc-sums-and-scale-invariant-scattering>.

Aloisio:2024:FAA

- [1609] M. Aloisio, S. L. de Carvalho, C. R. de Oliveira, and E. Souza. On the Fourier asymptotics of absolutely continuous measures with power-law singularities. *Journal of Mathematical Physics*, 65(1):012105, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/012105/3000801/On-the-Fourier-asymptotics-of-absolutely>.

Acosta-Humanez:2024:SQS

- [1610] Primitivo Acosta-Humánez, J. Tomás Lázaro, Juan J. Morales-Ruiz, and Chara Pantazi. Semiclassical quantification of some two degree of freedom potentials: a differential Galois approach. *Journal of Mathematical Physics*, 65(1):012106, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/012106/3061810/Semiclassical-quantification-of-some-two-degree-of>.

Nagiyev:2024:WFS

- [1611] S. M. Nagiyev, A. M. Jafarova, and E. I. Jafarov. The Wigner function of a semiconfined harmonic oscillator model with a position-dependent effective mass. *Journal of Mathematical Physics*, 65(1):012107, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/012107/3061621/The-Wigner-function-of-a-semiconfined-harmonic>.

Bernards:2024:MSS

- [1612] Fabian Bernards and Otfried Gühne. Multiparticle singlet states cannot be maximally entangled for the bipartitions. *Journal of Mathematical Physics*, 65(1):012201, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/012201/3061619/Multiparticle-singlet-states-cannot-be-maximally>.

Oeckl:2024:CQF

- [1613] Robert Oeckl and Juan Orendain Almada. Compositional quantum field theory: an axiomatic presentation. *Journal of Mathematical Physics*,

65(1):012301, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/012301/3250946/Compositional-quantum-field-theory-An-axiomatic>.

Kadlecova:2024:ASW

- [1614] Hedvika Kadlecová. On the absence of shock waves and vacuum birefringence in Born–Infeld electrodynamics. *Journal of Mathematical Physics*, 65(1):012302, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/012302/3253558/On-the-absence-of-shock-waves-and-vacuum>.

Wu:2024:SND

- [1615] Xinglong Wu, Xin Zhang, and Yanan Liu. Some new decay properties of solutions for a modified Camassa–Holm equation with cubic nonlinearity. *Journal of Mathematical Physics*, 65(1):012701, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/012701/2932864/Some-new-decay-properties-of-solutions-for-a>.

Wang:2024:EAB

- [1616] Yejuan Wang, Yaping Liu, and Tomás Caraballo. The existence and asymptotic behavior of solutions to 3D viscous primitive equations with Caputo fractional time derivatives. *Journal of Mathematical Physics*, 65(1):013101, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/013101/3105980/The-existence-and-asymptotic-behavior-of-solutions>.

ElWassouli:2024:HAL

- [1617] Fouzia El Wassouli. Harmonic analysis on line bundles over the exceptional domain $E_{7(-25)}/U(1)$. *Journal of Mathematical Physics*, 65(1):013501, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/013501/2932933/Harmonic-analysis-on-line-bundles-over-the>.

Sikorski:2024:LKE

- [1618] A. Sikorski, E. Ribera Borrell, and M. Weber. Learning Koopman eigenfunctions of stochastic diffusions with optimal importance sampling and ISOKANN. *Journal of Mathematical Physics*, 65(1):013502, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic).

(electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/013502/2933145/Learning-Koopman-eigenfunctions-of-stochastic>.

Almutairi:2024:CBU

- [1619] Alhanouf M. Almutairi and Phillip S. Isaac. A connection between $uq(\mathfrak{sl}(3))$ and $Z_2 \times Z_2$ -graded special linear Lie colour algebras via Klein operators. *Journal of Mathematical Physics*, 65(1):013503, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/013503/3061454/A-connection-between-Uq-sl-3-and-Z2-Z2-graded>.

Yang:2024:INP

- [1620] Chuan-Fu Yang, Xin-Jian Xu, and Ai-Wei Guan. An inverse nodal problem for a fourth-order self-adjoint binomial operator. *Journal of Mathematical Physics*, 65(1):013504, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/013504/3105998/An-inverse-nodal-problem-for-a-fourth-order-self>.

An:2024:TTU

- [1621] Rui An, Na Wang, and Zhaowen Yan. Two types of universal characters and the integrable hierarchies. *Journal of Mathematical Physics*, 65(1):013505, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/013505/3150041/Two-types-of-universal-characters-and-the>.

Capriotti:2024:CSF

- [1622] S. Capriotti. Chern–Simons field theory on the general affine group, 3 d -gravity and the extension of Cartan connections. *Journal of Mathematical Physics*, 65(1):013506, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/013506/3253560/Chern--Simons-field-theory-on-the-general-affine>.

Zhang:2024:RHA

- [1623] Ling Zhang, Bei-Bei Hu, and Zu-Yi Shen. Riemann–Hilbert approach to the focusing and defocusing nonlocal complex modified Korteweg–de Vries equation with step-like initial data. *Journal of Mathematical Physics*, 65(1):013507, January 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/1/013507/3253615/Riemann--Hilbert-approach-to-the-focusing-and>.

Benguria:2024:PSC

- [1624] Rafael Benguria, Jan Philip Solovej, and Martin Zirnbauer. Preface to the special collection in honor of Freeman Dyson. *Journal of Mathematical Physics*, 65(2):020401, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/020401/3262878/Preface-to-the-Special-Collection-in-Honor-of>.

Lin:2024:GWP

- [1625] Qiang Lin, Yue Pang, Xingchang Wang, and Zhengsheng Xu. Global well-posedness of solutions for 2-d Klein–Gordon equations with exponential nonlinearity. *Journal of Mathematical Physics*, 65(2):021501, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/021501/3261565/Global-well-posedness-of-solutions-for-2-D-Klein>.

Han:2024:FKF

- [1626] Yuecai Han and Guanyu Wu. Feynman–Kac formula for parabolic Anderson model in Gaussian potential and fractional white noise. *Journal of Mathematical Physics*, 65(2):021502, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/021502/3261747/Feynman-Kac-formula-for-parabolic-Anderson-model>.

Lei:2024:FPB

- [1627] Yuanjie Lei, Jing Zhang, and Xueying Zhang. The Fokker–Planck–Boltzmann equation in the finite channel. *Journal of Mathematical Physics*, 65(2):021503, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/021503/3263759/The-Fokker-Planck-Boltzmann-equation-in-the-finite>.

Fischbacher:2024:EEB

- [1628] Christoph Fischbacher and Lee Fisher. Entanglement entropy bounds for droplet states of the XXZ model on the strip. *Journal of Mathematical Physics*, 65(2):021901, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/021901/3261570/Entanglement-entropy-bounds-for-droplet-states-of>.

Perice:2024:MLL

- [1629] Denis P rice. Multiple Landau level filling for a large magnetic field limit of 2D fermions. *Journal of Mathematical Physics*, 65(2):021902, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/021902/3267535/Multiple-Landau-level-filling-for-a-large-magnetic>.

Svetlichnyy:2024:MPS

- [1630] Pavel Svetlichnyy, Shivan Mittal, and T. A. B. Kennedy. Matrix product states and the decay of quantum conditional mutual information. *Journal of Mathematical Physics*, 65(2):022201, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/022201/3267534/Matrix-product-states-and-the-decay-of-quantum>.

Borji:2024:SCT

- [1631] Majdouline Borji and Christoph Kopper. The surface counter-terms of the φ_4^4 theory on the half space $\mathbf{R}^+ \times \mathbf{R}^3$. *Journal of Mathematical Physics*, 65(2):022301, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/022301/3267537/The-surface-counter-terms-of-the-44-theory-on-the>.

Halilsoy:2024:GSC

- [1632] M. Halilsoy and V. Memari. Generating spacetimes from colliding sources. *Journal of Mathematical Physics*, 65(2):022501, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/022501/3261569/Generating-spacetimes-from-colliding-sources>.

Vazquez:2024:CCS

- [1633] Oswaldo Vazquez and Puskar Mondal. Continuation criterion for solutions to the Einstein equations. *Journal of Mathematical Physics*, 65(2):022502, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/022502/3261739/Continuation-criterion-for-solutions-to-the>.

Taylor:2024:FSE

- [1634] Martin Taylor. Future stability of expanding spatially homogeneous FLRW solutions of the spherically symmetric Einstein-massless Vlasov

system with spatial topology R3. *Journal of Mathematical Physics*, 65(2):022503, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/022503/3262811/Future-stability-of-expanding-spatially>.

Zhang:2024:QPS

- [1635] Dongfeng Zhang and Junxiang Xu. Quasi-periodic solutions of n coupled Schrödinger equations with Liouvillean basic frequencies. *Journal of Mathematical Physics*, 65(2):022701, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/022701/3261433/Quasi-periodic-solutions-of-n-coupled-Schrodinger>.

Wen:2024:SDD

- [1636] Buyu Wen and Qun Liu. The stationary distribution and density function of a stochastic SIRB cholera model with Ornstein–Uhlenbeck process. *Journal of Mathematical Physics*, 65(2):022702, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/022702/3261575/The-stationary-distribution-and-density-function>.

Li:2024:LDS

- [1637] Xintao Li. Limiting dynamics of stochastic complex Ginzburg–Landau lattice systems with long-range interactions in weighted space. *Journal of Mathematical Physics*, 65(2):022703, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/022703/3261576/Limiting-dynamics-of-stochastic-complex-Ginzburg>.

Xu:2024:IST

- [1638] Mingxing Xu, Shaoyun Shi, and Kaiyin Huang. On the integrable stretch-twist-fold flow: Bi-Hamiltonian structures and global dynamics. *Journal of Mathematical Physics*, 65(2):022704, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/022704/3261742/On-the-integrable-stretch-twist-fold-flow-Bi>.

Blower:2024:HFG

- [1639] Gordon Blower, Azadeh Khaleghi, and Moe Kuchemann-Scales. Hasmoto frames and the Gibbs measure of the periodic nonlinear Schrödinger equation. *Journal of Mathematical Physics*, 65(2):022705, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic).

(electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/022705/3261923/Hasimoto-frames-and-the-Gibbs-measure-of-the>.

Song:2024:WPR

- [1640] Chenwei Song and Rui Xu. Wave propagation of a reaction-diffusion cholera model with hyperinfectious vibrios and spatio-temporal delay. *Journal of Mathematical Physics*, 65(2):022706, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/022706/3262812/Wave-propagation-of-a-reaction-diffusion-cholera>.

Zhou:2024:DPS

- [1641] Yaxin Zhou and Daqing Jiang. Dynamic property of a stochastic cooperative species system with distributed delays and Ornstein–Uhlenbeck process. *Journal of Mathematical Physics*, 65(2):022707, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/022707/3266243/Dynamic-property-of-a-stochastic-cooperative>.

Wu:2024:PPS

- [1642] Weisheng Wu and Xichen Zhang. Preimage pressure on subsets and multifractal analysis. *Journal of Mathematical Physics*, 65(2):022708, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/022708/3267356/Preimage-pressure-on-subsets-and-multifractal>.

Easo:2024:DES

- [1643] Philip Easo, Tom Hutchcroft, and Jana Kurrek. Double-exponential susceptibility growth in Dyson’s hierarchical model with $|x - y|^{-2}$ interaction. *Journal of Mathematical Physics*, 65(2):023301, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/023301/3261574/Double-exponential-susceptibility-growth-in-Dyson>.

Bhaskaran:2024:SMB

- [1644] Rajeev Bhaskaran and Vijay Ganesh Sadhasivam. Stochastic model for barrier crossings and fluctuations in local timescale. *Journal of Mathematical Physics*, 65(2):023302, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/023302/3261875/Stochastic-model-for-barrier-crossings-and>.

Mazzolo:2024:ESP

- [1645] Alain Mazzolo. Exact solutions for the probability density of various conditioned processes with an entrance boundary. *Journal of Mathematical Physics*, 65(2):023303, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/023303/3266997/Exact-solutions-for-the-probability-density-of>.

Akemann:2024:GUG

- [1646] Gernot Akemann, Noah Aygün, and Tim R. Würfel. Generalised unitary group integrals of Ingham-Siegel and Fisher-Hartwig type. *Journal of Mathematical Physics*, 65(2):023501, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/023501/3262377/Generalised-unitary-group-integrals-of-Ingham-Siegel-and-Fisher-Hartwig-type>.

Adler:2024:NFS

- [1647] V. E. Adler. Negative flows for several integrable models. *Journal of Mathematical Physics*, 65(2):023502, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/023502/3266996/Negative-flows-for-several-integrable-models>.

Stovicek:2024:CGF

- [1648] Pavel Stovicek. Coulomb Green's function and an addition formula for the Whittaker functions. *Journal of Mathematical Physics*, 65(2):023503, February 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/2/023503/3267536/Coulomb-Green-s-function-and-an-addition-formula>.

Zhang:2024:RUG

- [1649] Mingyu Zhang. Regularity and uniqueness of global solutions for the 3D compressible micropolar fluids. *Journal of Mathematical Physics*, 65(3):031501, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/031501/3267969/Regularity-and-uniqueness-of-global-solutions-for>.

Deng:2024:ESC

- [1650] Shengbing Deng and Junwei Yu. Existence of solution for a class of fractional Hamiltonian-type elliptic systems with exponential critical growth in \mathbb{R} . *Journal of Mathematical Physics*, 65(3):031502,

March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/031502/3267972/Existence-of-solution-for-a-class-of-fractional->

Lian:2024:GES

- [1651] Ruxu Lian, Jieqiong Ma, and Qingcun Zeng. Global existence of the strong solution to the climate dynamics model with topography effects and phase transformation of water vapor. *Journal of Mathematical Physics*, 65(3):031503, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/031503/3267973/Global-existence-of-the-strong-solution-to-the->

Shang:2024:LTB

- [1652] Haifeng Shang. Large time behavior for the Hall-MHD equations with horizontal dissipation. *Journal of Mathematical Physics*, 65(3):031504, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/031504/3269917/Large-time-behavior-for-the-Hall-MHD-equations->

Larsen-Scott:2024:LSO

- [1653] James Larsen-Scott and Julie Clutterbuck. Local spectral optimisation for Robin problems with negative boundary parameter on quadrilaterals. *Journal of Mathematical Physics*, 65(3):031505, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/031505/3270260/Local-spectral-optimisation-for-Robin-problems->

Zhang:2024:CRS

- [1654] Yiping Zhang. Convergence rates for the stationary and non-stationary Navier–Stokes equations over non-Lipschitz boundaries. *Journal of Mathematical Physics*, 65(3):031506, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/031506/3270257/Convergence-rates-for-the-stationary-and-non->

Petropoulou:2024:ESB

- [1655] Eugenia N. Petropoulou, Mohammad Ferdows, and Efstratios E. Tzirtzilakis. Exact solutions of Burgers equation with moving boundary. *Journal of Mathematical Physics*, 65(3):031507, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/031507/3271052/Exact-solutions-of-Burgers-equation-with-moving->

Cao:2024:CSA

- [1656] Lei Cao and Shouxin Chen. Cosmic strings arising in a self-dual Abelian Higgs model. *Journal of Mathematical Physics*, 65(3):031508, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/031508/3275725/Cosmic-strings-arising-in-a-self-dual-Abelian>

Fan:2024:CKT

- [1657] Haining Fan, Yongbin Wang, and Lin Zhao. On a class of Kirchhoff type logarithmic Schrödinger equations involving the critical or supercritical Sobolev exponent. *Journal of Mathematical Physics*, 65(3):031509, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/031509/3278508/On-a-class-of-Kirchhoff-type-logarithmic>.

Xu:2024:DIR

- [1658] Xiao-Chuan Xu and Ting-Ting Zuo. Direct and inverse resonance problems for the massless Dirac operator on the half line. *Journal of Mathematical Physics*, 65(3):031510, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/031510/3279071/Direct-and-inverse-resonance-problems-for-the>.

Zhu:2024:IFC

- [1659] Chendi Zhu and Jing Kang. An integrable four-component Camassa–Holm-type system. *Journal of Mathematical Physics*, 65(3):031511, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/031511/3279488/An-integrable-four-component-Camassa--Holm-type>.

Das:2024:SCT

- [1660] Apurba Das, Shuangjian Guo, and Yufei Qin. L_∞ -structures and cohomology theory of compatible \mathcal{O} -operators and compatible dendriform algebras. *Journal of Mathematical Physics*, 65(3):031701, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/031701/3268101/L-structures-and-cohomology-theory-of-compatible-0>.

Dray:2024:NDAa

- [1661] Tevian Dray, Corinne A. Manogue, and Robert A. Wilson. A new division algebra representation of E_6 from E_8 . *Journal of Mathematical*

Physics, 65(3):031702, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/031702/3278070/A-new-division-algebra-representation-of-E6-from>. See publisher's note [1755].

Dray:2024:NDAb

- [1662] Tevian Dray, Corinne A. Manogue, and Robert A. Wilson. A new division algebra representation of E_7 from E_8 . *Journal of Mathematical Physics*, 65(3):031703, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/031703/3278089/A-new-division-algebra-representation-of-E7-from>.

Chen:2024:SOV

- [1663] Hong-Bin Chen. On the self-overlap in vector spin glasses. *Journal of Mathematical Physics*, 65(3):031901, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/031901/3268755/On-the-self-overlap-in-vector-spin-glasses>.

Banerjee:2024:CES

- [1664] Suman Banerjee, Rajesh Kumar Yadav, Avinash Khare, and Bhabani Prasad Mandal. A class of exactly solvable real and complex PT symmetric reflectionless potentials. *Journal of Mathematical Physics*, 65(3):032101, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/032101/3268060/A-class-of-exactly-solvable-real-and-complex-PT>.

Facchi:2024:SGP

- [1665] Paolo Facchi and Marilena Ligabò. Stability of the gapless pure point spectrum of self-adjoint operators. *Journal of Mathematical Physics*, 65(3):032102, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/032102/3268350/Stability-of-the-gapless-pure-point-spectrum-of>.

Menguturk:2024:DTF

- [1666] Levent Ali Mengütürk. On Doob h -transformations for finite-time quantum state reduction. *Journal of Mathematical Physics*, 65(3):032103, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/>

3/032103/3268626/On-Doob-h-transformations-for-finite-time-quantum.

Mali:2024:SFG

- [1667] Petar Mali, Sonja Gombar, Slobodan Radosević, Milica Rutonjski, Milan Pantić, and Milica Pavkov-Hrvojević. Summation formulas generated by Hilbert space eigenproblem. *Journal of Mathematical Physics*, 65(3):032104, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/032104/3270774/Summation-formulas-generated-by-Hilbert-space>.

vanNeerven:2024:TTU

- [1668] Jan van Neerven and Pierre Portal. Thermal time as an unsharp observable. *Journal of Mathematical Physics*, 65(3):032105, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/032105/3277936/Thermal-time-as-an-unsharp-observable>.

Fawzi:2024:ECG

- [1669] Hamza Fawzi, Omar Fawzi, and Samuel O. Scalet. Entropy constraints for ground energy optimization. *Journal of Mathematical Physics*, 65(3):032201, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/032201/3267974/Entropy-constraints-for-ground-energy-optimization>.

Gustavsson:2024:WLD

- [1670] Andreas Gustavsson. WZW in the lightlike directions. *Journal of Mathematical Physics*, 65(3):032301, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/032301/3267975/WZW-in-the-lightlike-directions>.

BenGeloun:2024:QTL

- [1671] Joseph Ben Geloun, Andreas G. A. Pithis, and Johannes Thürigen. QFT with tensorial and local degrees of freedom: Phase structure from functional renormalization. *Journal of Mathematical Physics*, 65(3):032302, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/032302/3268106/QFT-with-tensorial-and-local-degrees-of-freedom>.

Mohamed:2024:BSC

- [1672] Mariem Magdy Ali Mohamed, Kartik Prabhu, and Juan A. Valiente Kroon. BMS-supertranslation charges at the critical sets of null infinity. *Journal of Mathematical Physics*, 65(3):032501, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/032501/3278099/BMS-supertranslation-charges-at-the-critical-sets>.

Lei:2024:ESI

- [1673] Ting Lei and Guanggan Chen. Effective splitting of invariant measures for a stochastic reaction diffusion equation with multiplicative noise. *Journal of Mathematical Physics*, 65(3):032701, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/032701/3268114/Effective-splitting-of-invariant-measures-for-a>.

Maheswari:2024:PAP

- [1674] C. Uma Maheswari, N. Muthuchamy, V. K. Chandrasekar, R. Sahadevan, and M. Lakshmanan. Painlevé analysis, Prolle–Singer approach, symmetries and integrability of damped Hénon–Heiles system. *Journal of Mathematical Physics*, 65(3):032702, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/032702/3277716/Painleve-analysis-Prolle--Singer-approach>.

Guillen:2024:HMS

- [1675] G. J. Gutierrez Guillen, D. Sugny, and P. Mardesić. Hamiltonian monodromy via spectral Lax pairs. *Journal of Mathematical Physics*, 65(3):032703, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/032703/3277848/Hamiltonian-Monodromy-via-spectral-Lax-pairs>.

He:2024:ASD

- [1676] Jinfang He, Jijun Wang, and Yandong Zhao. Asymptotics for the semi-dissipative 2D Boussinesq system. *Journal of Mathematical Physics*, 65(3):032704, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/032704/3279077/Asymptotics-for-the-semi-dissipative-2D-Boussinesq>.

Powell:2024:PMC

- [1677] M. Powell. Pointwise modulus of continuity of the Lyapunov exponent and integrated density of states for analytic multi-frequency quasi-periodic $m(2,c)$ cocycles. *Journal of Mathematical Physics*, 65(3):032705, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/032705/3279492/Pointwise-modulus-of-continuity-of-the-Lyapunov>.

Wang:2024:IPD

- [1678] Feng Wang and Chuan-Fu Yang. Inverse problems for Dirac operators with constant delay less than half of the interval. *Journal of Mathematical Physics*, 65(3):032706, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/032706/3279491/Inverse-problems-for-Dirac-operators-with-constant>.

Massa:2024:NHH

- [1679] Enrico Massa and Enrico Pagani. The non-holonomic Herglotz variational problem. *Journal of Mathematical Physics*, 65(3):032901, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/032901/3279683/The-non-holonomic-Herglotz-variational-problem>.

Pradeep:2024:CCR

- [1680] Pradeep, Rahul Kumar Chaturvedi, and L. P. Singh. The concentration and cavitation in the Riemann solution for non-homogeneous logarithmic equation of state with magnetic field. *Journal of Mathematical Physics*, 65(3):033101, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/033101/3267976/The-concentration-and-cavitation-in-the-Riemann>.

Kravchenko:2024:RTC

- [1681] Vladislav V. Kravchenko. Reconstruction techniques for complex potentials. *Journal of Mathematical Physics*, 65(3):033501, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/033501/3267979/Reconstruction-techniques-for-complex-potentials>.

Lanconelli:2024:ACD

- [1682] Alberto Lanconelli and Berk Tan Perçin. Analysis of the chemical diffusion master equation for creation and mutual annihilation reactions. *Journal of Mathematical Physics*, 65(3):033502, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/033502/3267978/Analysis-of-the-chemical-diffusion-master-equation>.

Maffucci:2024:ADN

- [1683] Riccardo W. Maffucci and Maurizia Rossi. Asymptotic distribution of nodal intersections for ARW against a surface. *Journal of Mathematical Physics*, 65(3):033503, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/033503/3268351/Asymptotic-distribution-of-nodal-intersections-for>.

Bouhrara:2024:SUP

- [1684] Adil Bouhrara and Samir Kabbaj. Some uncertainty principles for the quaternion Heisenberg group. *Journal of Mathematical Physics*, 65(3):033504, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/033504/3268627/Some-uncertainty-principles-for-the-quaternion>.

Liu:2024:ASA

- [1685] Tianye Liu, Daniel A. Norman, and Philip D. Mannheim. Analytic structure of the associated Legendre functions of the second kind. *Journal of Mathematical Physics*, 65(3):033505, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/033505/3275723/Analytic-structure-of-the-associated-Legendre>.

Kordyukov:2024:TOE

- [1686] Yu. Kordyukov and V. Manuilov. On topological obstructions to the existence of non-periodic Wannier bases. *Journal of Mathematical Physics*, 65(3):033506, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/033506/3275729/On-topological-obstructions-to-the-existence-of>.

Castillo:2024:CCM

- [1687] K. Castillo and D. Mbouna. A counterexample to a conjecture of m. ismail. *Journal of Mathematical Physics*, 65(3):033507, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic).

(electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/033507/3278867/A-counterexample-to-a-conjecture-of-M-Ismail>.

Bhaskaran:2024:PN

- [1688] Rajeev Bhaskaran and Vijay Ganesh Sadhasivam. Publisher's note: "Stochastic model for barrier crossings and fluctuations in local timescale" [J. Math. Phys. **65**, 023302 (2024)]. *Journal of Mathematical Physics*, 65(3):039901, March 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/3/039901/3267977/Publisher-s-Note-Stochastic-model-for-barrier>.

He:2024:UCS

- [1689] Zhen He and Zhaoyang Yin. Uniqueness of conservative solutions to the modified Camassa–Holm equation via characteristics. *Journal of Mathematical Physics*, 65(4):041501, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/041501/3280169/Uniqueness-of-conservative-solutions-to-the>.

Maafa:2024:VVL

- [1690] Youssouf Maafa and Oussama Melkemi. On the vanishing viscosity limit for the viscous and resistive 3D magnetohydrodynamic system with axisymmetric data. *Journal of Mathematical Physics*, 65(4):041502, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/041502/3280557/On-the-vanishing-viscosity-limit-for-the-viscous>.

Rose:2024:UCE

- [1691] C. Rose and M. Tautenhahn. Unique continuation estimates on manifolds with Ricci curvature bounded below. *Journal of Mathematical Physics*, 65(4):041503, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/041503/3280857/Unique-continuation-estimates-on-manifolds-with>.

Niu:2024:GWP

- [1692] Dongjuan Niu and Lu Wang. Global well-posedness of three-dimensional incompressible Boussinesq system with temperature-dependent viscosity. *Journal of Mathematical Physics*, 65(4):041504, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/041504/3281135/Global-well-posedness-of-three-dimensional>.

Cui:2024:ESS

- [1693] Wanchen Cui and Hong Cai. On the existence and stability of stationary solutions for the compressible micropolar fluids. *Journal of Mathematical Physics*, 65(4):041505, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/041505/3281136/On-the-existence-and-stability-of-stationary>.

Indrei:2024:FEL

- [1694] Emanuel Indrei. On the first eigenvalue of the Laplacian for polygons. *Journal of Mathematical Physics*, 65(4):041506, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/041506/3282270/On-the-first-eigenvalue-of-the-Laplacian-for>. See publisher's note [1754].

Li:2024:PVF

- [1695] Kelin Li and Yuexun Wang. On the physical vacuum free boundary problem of the 1D shallow water equations coupled with the Poisson equation. *Journal of Mathematical Physics*, 65(4):041507, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/041507/3283037/On-the-physical-vacuum-free-boundary-problem-of>.

Shao:2024:MLS

- [1696] Mengqiu Shao, Yunyan Yang, and Liang Zhao. Multiplicity and limit of solutions for logarithmic Schrödinger equations on graphs. *Journal of Mathematical Physics*, 65(4):041508, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/041508/3283036/Multiplicity-and-limit-of-solutions-for>.

Zhou:2024:EPS

- [1697] Yuqian Zhou, Qiuyan Zhang, Jibin Li, and Mengke Yu. Exact periodic solution family of the complex cubic-quintic Ginzburg–Landau equation with intrapulse Raman scattering. *Journal of Mathematical Physics*, 65(4):041509, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/041509/3283035/Exact-periodic-solution-family-of-the-complex>.

Guo:2024:PRS

- [1698] Zongming Guo and Fangshu Wan. Positive rupture solutions of steady states for thin-film-type equations. *Journal of Mathematical Physics*, 65(4):041510, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/041510/3283164/Positive-rupture-solutions-of-steady-states-for>.

Liu:2024:NSKa

- [1699] Min Liu and Rui Sun. Normalized solutions for Kirchhoff–Choquard type equations with different potentials. *Journal of Mathematical Physics*, 65(4):041511, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/041511/3283261/Normalized-solutions-for-Kirchhoff-Choquard-type>.

Mansouri:2024:ABS

- [1700] Sabeur Mansouri. Asymptotic behavior for a semilinear Bresse system with variable coefficients and locally distributed nonlinear dissipation. *Journal of Mathematical Physics*, 65(4):041512, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/041512/3284651/Asymptotic-behavior-for-a-semilinear-Bresse-system>.

Chen:2024:IMS

- [1701] Haibo Chen, Xiansheng Dai, Dong Liu, and Yufeng Pei. Irreducible modules over $N = 2$ superconformal algebras arising from algebraic d -modules. *Journal of Mathematical Physics*, 65(4):041701, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/041701/3281138/Irreducible-modules-over-N-2-superconformal>.

Li:2024:RAA

- [1702] Huaimin Li and Qing Wang. Representations of the affine ageing algebra $\hat{\mathfrak{sl}}(1)$. *Journal of Mathematical Physics*, 65(4):041702, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/041702/3282501/Representations-of-the-affine-ageing-algebra-age-1>.

Minami:2024:ODS

- [1703] Nariyuki Minami. One-dimensional Schrödinger operator with decaying white noise potential. *Journal of Mathematical Physics*, 65(4):042101, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/042101/3280406/One-dimensional-Schrodinger-operator-with-decaying>.

Mariani:2024:SAM

- [1704] A. Mariani and U.-J. Wiese. Self-adjoint momentum operator for a particle confined in a multi-dimensional cavity. *Journal of Mathematical Physics*, 65(4):042102, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/042102/3282882/Self-adjoint-momentum-operator-for-a-particle>.

Urban:2024:VOV

- [1705] Roman Urban. The Vladimirov operator with variable coefficients on finite adeles and the Feynman formulas for the Schrödinger equation. *Journal of Mathematical Physics*, 65(4):042103, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/042103/3283262/The-Vladimirov-operator-with-variable-coefficients>.

Marcolli:2024:QSM

- [1706] Matilde Marcolli and Jane Panangaden. Quantum statistical mechanics and the boundary of modular curves. *Journal of Mathematical Physics*, 65(4):042104, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/042104/3284841/Quantum-statistical-mechanics-and-the-boundary-of>.

Hiroshima:2024:TOH

- [1707] Fumio Hiroshima and Noriaki Teranishi. Time operators of harmonic oscillators and their representations. *Journal of Mathematical Physics*, 65(4):042105, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/042105/3284912/Time-operators-of-harmonic-oscillators-and-their>.

Kumar:2024:ASS

- [1708] V. B. Kiran Kumar and Anmary Tonny. On approximating the symplectic spectrum of infinite-dimensional operators. *Journal of Mathematical*

Physics, 65(4):042201, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/042201/3280558/On-approximating-the-symplectic-spectrum-of>.

Kato:2024:ERD

- [1709] Shinya Kato. On $\alpha - z$ -Rényi divergence in the von Neumann algebra setting. *Journal of Mathematical Physics*, 65(4):042202, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/042202/3280741/On-z-Renyi-divergence-in-the-von-Neumann-algebra>.

Bekaert:2024:ASV

- [1710] Xavier Bekaert, Nicolas Boulanger, Yegor Goncharov, and Maxim Grigoriev. Ambient-space variational calculus for gauge fields on constant-curvature spacetimes. *Journal of Mathematical Physics*, 65(4):042301, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/042301/3283149/Ambient-space-variational-calculus-for-gauge>.

Kopinski:2024:NSM

- [1711] Jarosław Kopiński, Alberto Soria, and Juan A. Valiente Kroon. New spinorial mass-quasilocal angular momentum inequality for initial data with marginally future trapped surface. *Journal of Mathematical Physics*, 65(4):042501, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/042501/3282880/New-spinorial-mass-quasilocal-angular-momentum>.

Mondal:2024:GES

- [1712] Puskar Mondal and Shing-Tung Yau. Global exterior stability of the Minkowski space: Coupled Einstein–Yang–Mills perturbations. *Journal of Mathematical Physics*, 65(4):042502, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/042502/3285617/Global-exterior-stability-of-the-Minkowski-space>.

Choi:2024:CST

- [1713] Sun-Ho Choi, Dohyun Kwon, and Hyowon Seo. Cucker–Smale type flocking models on a sphere. *Journal of Mathematical Physics*, 65(4):042701, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/042701/3280168/Cucker---Smale-type-flocking-models-on-a-sphere>.

McCarney:2024:NIW

- [1714] Jordan McCarney. Nonhydrostatic internal waves in the presence of mean currents and rotation. *Journal of Mathematical Physics*, 65(4):043101, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/043101/3283077/Nonhydrostatic-internal-waves-in-the-presence-of>.

Khodabandehlou:2024:PEN

- [1715] Faezeh Khodabandehlou, Christian Maes, and Karel Netocný. On the Poisson equation for nonreversible Markov jump processes. *Journal of Mathematical Physics*, 65(4):043301, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/043301/3280408/On-the-Poisson-equation-for-nonreversible-Markov>.

Quesne:2024:CEO

- [1716] C. Quesne. Connecting exceptional orthogonal polynomials of different kind. *Journal of Mathematical Physics*, 65(4):043501, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/043501/3280740/Connecting-exceptional-orthogonal-polynomials-of>.

Kaufmann:2024:TIT

- [1717] Ralph M. Kaufmann, Dan Li, and Birgit Wehefritz-Kaufmann. Topological insulators and K -theory. *Journal of Mathematical Physics*, 65(4):043502, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/043502/3282730/Topological-insulators-and-K-theory>.

Hermi:2024:NIO

- [1718] Lotfi Hermi and Naoki Saito. On a nonlocal integral operator commuting with the Laplacian and the Sturm–Liouville problem: Low rank perturbations of the operator. *Journal of Mathematical Physics*, 65(4):043503, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/043503/3283038/On-a-nonlocal-integral-operator-commuting-with-the>.

Watcharangkool:2024:ISS

- [1719] A. Watcharangkool, W. Sucpikarnon, and P. Bertozzini. Isometric spectral subtriples. *Journal of Mathematical Physics*, 65(4):043504,

April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/043504/3283263/Isometric-spectral-subtriples>.

Lin:2024:LTL

- [1720] Huian Lin and Liming Ling. Large-time lump patterns of Kadomtsev–Petviashvili I equation in a plasma analyzed via vector one-constraint method. *Journal of Mathematical Physics*, 65(4):043505, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/043505/3284652/Large-time-lump-patterns-of-Kadomtsev--Petviashvili>.

Yin:2024:ISA

- [1721] Zhe-Yong Yin and Shou-Fu Tian. On inverse scattering approach and action-angle variables to the Harry–Dym equation. *Journal of Mathematical Physics*, 65(4):043506, April 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/4/043506/3284830/On-inverse-scattering-approach-and-action-angle>.

Liu:2024:ABS

- [1722] Huoxia Liu and Qigui Yang. Asymptotic behaviors of solutions to Sobolev-type stochastic differential equations. *Journal of Mathematical Physics*, 65(5):051501, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/051501/3288731/Asymptotic-behaviors-of-solutions-to-Sobolev-type>.

Zhang:2024:GWPa

- [1723] Zhaoyun Zhang and Xiaopeng Zhao. Global well-posedness for 2D non-resistive MHD equations in half-space. *Journal of Mathematical Physics*, 65(5):051502, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/051502/3290490/Global-well-posedness-for-2D-non-resistive-MHD>.

Tianpei:2024:MTW

- [1724] Guo Tianpei. Multivortex traveling waves for the Schrödinger map equation. *Journal of Mathematical Physics*, 65(5):051503, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/051503/3291536/Multivortex-traveling-waves-for-the-Schrodinger>.

Wei:2024:GEB

- [1725] Changhua Wei and Zikai Yong. Global existence and blowup of smooth solutions to the semilinear wave equations in FLRW spacetime. *Journal of Mathematical Physics*, 65(5):051504, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/051504/3291534/Global-existence-and-blowup-of-smooth-solutions-to>.

Godin:2024:PDB

- [1726] Yuri A. Godin and Boris Vainberg. Propagation and dispersion of Bloch waves in periodic media with soft inclusions. *Journal of Mathematical Physics*, 65(5):051505, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/051505/3292420/Propagation-and-dispersion-of-Bloch-waves-in>.

Xie:2024:EMN

- [1727] J. Xie, H. Yang, and F. Wang. Effects of multiplicative noise on the fractional Hartree equation. *Journal of Mathematical Physics*, 65(5):051506, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/051506/3292492/Effects-of-multiplicative-noise-on-the-fractional>.

Yang:2024:CSR

- [1728] Guiyu Yang, Jingjun Zhang, and Zaihong Jiang. On the convergence of the solution for a reduced model of the vectorial quantum Zakharov system. *Journal of Mathematical Physics*, 65(5):051507, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/051507/3292419/On-the-convergence-of-the-solution-for-a-reduced>.

Cheng:2024:CQS

- [1729] Yongkuan Cheng and Yaotian Shen. On a class of quasilinear Schrödinger equations with superlinear terms. *Journal of Mathematical Physics*, 65(5):051508, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/051508/3292508/On-a-class-of-quasilinear-Schrodinger-equations>.

Golgeleyen:2024:ISP

- [1730] Fikret Gölgeleyen, Ismet Gölgeleyen, and Masahiro Yamamoto. An inverse source problem for the Schrödinger equation with variable coefficient.

cients by data on flat subboundary. *Journal of Mathematical Physics*, 65(5):051509, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/051509/3293239/An-inverse-source-problem-for-the-Schrodinger>.

Luo:2024:SLT

- [1731] Zehua Luo, Dan Li, and Yuzhu Wang. Stability and long time asymptotic for the 2D anisotropic micropolar Rayleigh–Bénard problem with horizontal dissipation. *Journal of Mathematical Physics*, 65(5):051510, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/051510/3293929/Stability-and-long-time-asymptotic-for-the-2D>.

Yang:2024:SNC

- [1732] Shuang Yang, Tomás Caraballo, and Qiangheng Zhang. Sufficient and necessary criteria for backward asymptotic autonomy of pullback attractors with applications to retarded sine-Gordon lattice systems. *Journal of Mathematical Physics*, 65(5):051511, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/051511/3293930/Sufficient-and-necessary-criteria-for-backward>.

Huang:2024:MPS

- [1733] Lanxin Huang and Jiabao Su. Multiple positive solutions of the quasilinear Schrödinger–Poisson system with critical exponent in $D^{1,p}(\mathbf{R}^3)$. *Journal of Mathematical Physics*, 65(5):051512, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/051512/3293937/Multiple-positive-solutions-of-the-quasilinear>.

Hedhly:2024:ERS

- [1734] Jihed Hedhly. Eigenvalue ratios for Sturm–Liouville problems. *Journal of Mathematical Physics*, 65(5):051513, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/051513/3293999/Eigenvalue-ratios-for-Sturm--Liouville-problems>.

Neretin:2024:DMM

- [1735] Yury A. Neretin. On Derkachov–Manashov R -matrices for the principal series of unitary representations. *Journal of Mathematical Physics*, 65(5):051701, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/051701/3289175/On-Derkachov-Manashov-R-matrices-for-the-principal>.

Vieyra:2024:WME

- [1736] Juan Carlos Lopez Vieyra and Alexander V. Turbiner. Wolfes model *aka* G_2/I_6 -rational integrable model: $g^{(2)}$, $g^{(3)}$ hidden algebras and quartic polynomial algebra of integrals. *Journal of Mathematical Physics*, 65(5):051702, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/051702/3292424/Wolfes-model-aka-G2-I6-rational-integrable-model-g>.

Firanko:2024:ALS

- [1737] Raz Firanko, Moshe Goldstein, and Itai Arad. Area law for steady states of detailed-balance local Lindbladians. *Journal of Mathematical Physics*, 65(5):051901, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/051901/3292515/Area-law-for-steady-states-of-detailed-balance>.

Avron:2024:HPM

- [1738] Joseph E. Avron and Ari M. Turner. Homotopy of periodic 2×2 matrices. *Journal of Mathematical Physics*, 65(5):051902, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/051902/3295378/Homotopy-of-periodic-2-2-matrices>.

Arroyo:2024:NCG

- [1739] Andrew Arroyo, Faye Castro, and Jake Fillman. On the number of closed gaps of discrete periodic one-dimensional operators. *Journal of Mathematical Physics*, 65(5):052101, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/052101/3291463/On-the-number-of-closed-gaps-of-discrete-periodic>.

Poumai:2024:MCO

- [1740] Khole Timothy Poumai, Nikhil Khanna, and S. K. Kaushik. On metric controlled operator-valued frames and their applications. *Journal of Mathematical Physics*, 65(5):052102, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/052102/3291535/On-metric-controlled-operator-valued-frames-and>.

Patra:2024:TSN

- [1741] Pinaki Patra. Tuning the separability in noncommutative space. *Journal of Mathematical Physics*, 65(5):052103, May 2024. CODEN JMAPAQ.

ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/052103/3291544/Tuning-the-separability-in-noncommutative-space>.

Lafleche:2024:OSR

- [1742] Laurent Lafleche. Optimal semiclassical regularity of projection operators and strong Weyl law. *Journal of Mathematical Physics*, 65(5):052104, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/052104/3294430/Optimal-semiclassical-regularity-of-projection>.

Rayhaun:2024:BRC

- [1743] Brandon C. Rayhaun. Bosonic rational conformal field theories in small genera, chiral fermionization, and symmetry/subalgebra duality. *Journal of Mathematical Physics*, 65(5):052301, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/052301/3291490/Bosonic-rational-conformal-field-theories-in-small>.

Bunney:2024:STM

- [1744] Cameron R. D. Bunney. Stationary trajectories in Minkowski spacetimes. *Journal of Mathematical Physics*, 65(5):052501, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/052501/3289101/Stationary-trajectories-in-Minkowski-spacetimes>.

Asadzade:2024:DAT

- [1745] Javad A. Asadzade and Nazim I. Mahmudov. Delayed analogue of three-parameter pseudo-Mittag-Leffler functions and their applications to Hilfer pseudo-fractional time retarded differential equations. *Journal of Mathematical Physics*, 65(5):052701, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/052701/3292514/Delayed-analogue-of-three-parameter-pseudo-Mittag>.

Gao:2024:APM

- [1746] Peng Gao. Averaging principles for multiscale stochastic Cahn–Hilliard system. *Journal of Mathematical Physics*, 65(5):052702, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/052702/3293998/Averaging-principles-for-multiscale-stochastic>.

Peng:2024:DNP

- [1747] Xiaoming Peng, Yadong Shang, and Jiali Yu. Dynamics of a nonlinear pseudo-parabolic equation with fading memory. *Journal of Mathematical Physics*, 65(5):052703, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/052703/3294251/Dynamics-of-a-nonlinear-pseudo-parabolic-equation>.

Klimcik:2024:PPM

- [1748] Ctirad Klimčík. Point particle E -models. *Journal of Mathematical Physics*, 65(5):052704, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/052704/3294928/Point-particle-E-models>.

Nakanishi:2024:HMS

- [1749] Hayato Nakanishi. Homological mirror symmetry of toric Fano surfaces via Morse homotopy. *Journal of Mathematical Physics*, 65(5):053501, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/053501/3290491/Homological-mirror-symmetry-of-toric-Fano-surfaces>.

Sarrico:2024:PDP

- [1750] C. O. R. Sarrico. Products of distributions and the problem of galactic rotation. *Journal of Mathematical Physics*, 65(5):053502, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/053502/3292513/Products-of-distributions-and-the-problem-of>.

Levin:2024:TTW

- [1751] A. Levin and M. Olshanetsky. Two types of Witten zeta functions. *Journal of Mathematical Physics*, 65(5):053503, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/053503/3293936/Two-types-of-Witten-zeta-functions>.

Duan:2024:LRB

- [1752] Xiaojuan Duan and Jipeng Cheng. Lax representation and Bäcklund–Darboux transformation for coupled BKP hierarchy. *Journal of Mathematical Physics*, 65(5):053504, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/053504/3294256/Lax-representation-and-Bäcklund-Darboux>.

Perrella:2024:E

- [1753] David Perrella, Nathan Duignan, and David Pfefferlé. Erratum: “Existence of global symmetries of divergence-free fields with first integrals” [J. Math. Phys. **64**, 052705 (2023)]. *Journal of Mathematical Physics*, 65(5):059901, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/059901/3289231/Erratum-Existence-of-global-symmetries-of>. See [1443].

Indrei:2024:PN

- [1754] Emanuel Indrei. Publisher’s note: “On the first eigenvalue of the Laplacian for polygons” [J. Math. Phys. **65**, 041506 (2024)]. *Journal of Mathematical Physics*, 65(5):059902, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/059902/3289368/Publisher-s-Note-On-the-first-eigenvalue-of-the>. See [1694].

Dray:2024:PN

- [1755] Tevian Dray, Corinne A. Manogue, and Robert A. Wilson. Publisher’s note: “A new division algebra representation of E_6 from E_8 ” [J. Math. Phys. **65**, 031702 (2024)]. *Journal of Mathematical Physics*, 65(5):059903, May 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/5/059903/3289369/Publisher-s-Note-A-new-division-algebra>. See [1661].

He:2024:ASP

- [1756] Cheng He, Ze Li, Ting Luo, and Changzheng Qu. Asymptotic stability of peakons for the two-component Novikov equation. *Journal of Mathematical Physics*, 65(6):061501, June 1, 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/6/061501/3295600/Asymptotic-stability-of-peakons-for-the-two>.

Cartin:2024:KRG

- [1757] Daniel Cartin. Knotted 4-regular graphs. II. Consistent application of the Pachner moves. *Journal of Mathematical Physics*, 65(6):061701, June 1, 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/6/061701/3295607/Knotted-4-regular-graphs-II-Consistent-application>.

Osabutey:2024:PPM

- [1758] Godwin Osabutey. Phase properties of the mean-field Ising model with three-spin interaction. *Journal of Mathematical Physics*, 65(6):061901, June 1, 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/6/061901/3296067/Phase-properties-of-the-mean-field-Ising-model>.

Sinha:2024:PGF

- [1759] Pritish Sinha and Ankit Yadav. Poisson geometric formulation of quantum mechanics. *Journal of Mathematical Physics*, 65(6):062101, June 1, 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/6/062101/3295606/Poisson-geometric-formulation-of-quantum-mechanics>.

Enciso:2024:ILG

- [1760] Alberto Enciso, Alba García-Ruiz, and Daniel Peralta-Salas. Inverse localization and global approximation for some Schrödinger operators on hyperbolic spaces. *Journal of Mathematical Physics*, 65(6):062102, June 1, 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/6/062102/3295605/Inverse-localization-and-global-approximation-for>.

Becker:2024:CMT

- [1761] Simon Becker and Maciej Zworski. From the chiral model of TBG to the Bistritzer–MacDonald model. *Journal of Mathematical Physics*, 65(6):062103, June 1, 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/6/062103/3295867/From-the-chiral-model-of-TBG-to-the-Bistritzer>.

Pitelli:2024:QMS

- [1762] João Paulo M. Pitelli, Ricardo A. Mosna, and Felipe Felix Souto. Quantum mechanics on sharply bent wires via two-interval Sturm–Liouville theory. *Journal of Mathematical Physics*, 65(6):062104, June 1, 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/6/062104/3296066/Quantum-mechanics-on-sharply-bent-wires-via-two>.

Cai:2024:LWT

- [1763] Fangzhou Cai. Local weighted topological pressure. *Journal of Mathematical Physics*, 65(6):062701, June 1, 2024. CODEN JMAPAQ.

ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/6/062701/3296068/Local-weighted-topological-pressure>.

Dkhissi:2024:PIH

- [1764] Hajar Dkhissi and Allal Ghanmi. Polymeromorphic Itô—Hermite functions associated with a singular potential vector on the punctured complex plane. *Journal of Mathematical Physics*, 65(6):063501, June 1, 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/6/063501/3295608/Polymeromorphic-Ito-Hermite-functions-associated>.

Chung:2024:EBC

- [1765] Jaywan Chung, Seungmin Kang, Ho-Youn Kim, and Yong-Jung Kim. Emergence of boundary conditions in the heat equation. *Journal of Mathematical Physics*, 65(7):071501, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/071501/3300332/Emergence-of-boundary-conditions-in-the-heat>.

He:2024:MBS

- [1766] Xiaoming He, Yuxi Meng, and Patrick Winkert. Multiple bound states for a class of fractional critical Schrödinger–Poisson systems with critical frequency. *Journal of Mathematical Physics*, 65(7):071502, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/071502/3300331/Multiple-bound-states-for-a-class-of-fractional>.

Jiang:2024:SLR

- [1767] W. Jiang, D. Jin, T. Li, and T. Chen. The singular limits of the Riemann solutions as pressure vanishes for a reduced two-phase mixtures model with non-isentropic gas state. *Journal of Mathematical Physics*, 65(7):071503, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/071503/3300711/The-singular-limits-of-the-Riemann-solutions-as>.

Gao:2024:SPB

- [1768] Chen Gao and Liqun Zhang. The steady Prandtl boundary layer expansions for non-shear Euler flow. *Journal of Mathematical Physics*, 65(7):071504, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/071504/3302761/The-steady-Prandtl-boundary-layer-expansions-for>.

Tan:2024:GSM

- [1769] Zhong Tan and Hui Yang. Generalized solutions to the model of compressible viscous fluids coupled with the Poisson equation. *Journal of Mathematical Physics*, 65(7):071505, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/071505/3303651/Generalized-solutions-to-the-model-of-compressible>.

Kato:2024:NSF

- [1770] Keiichi Kato, Wataru Nakahashi, and Yukihide Tadano. Non-smoothness of the fundamental solutions for Schrödinger equations with super-quadratic and spherically symmetric potential. *Journal of Mathematical Physics*, 65(7):071506, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/071506/3303806/Non-smoothness-of-the-fundamental-solutions-for>.

Liu:2024:NSKb

- [1771] Changlin Liu, Ying Lv, and Zengqi Ou. Normalized solutions for Kirchhoff equation with L^2 -critical exponents. *Journal of Mathematical Physics*, 65(7):071507, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/071507/3304667/Normalized-solutions-for-Kirchhoff-equation-with>.

Zwart:2024:MCE

- [1772] Kevin Zwart. On the Mathieu conjecture for $\mathrm{Sp}(N)$ and G_2 . *Journal of Mathematical Physics*, 65(7):071701, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/071701/3302141/On-the-Mathieu-conjecture-for-Sp-N-and-G2>.

Tantubay:2024:RTF

- [1773] Santanu Tantubay and Priyanshu Chakraborty. Representations of toroidal and full toroidal Lie algebras over polynomial algebras. *Journal of Mathematical Physics*, 65(7):071702, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/071702/3304135/Representations-of-toroidal-and-full-toroidal-Lie>.

Luo:2024:LHC

- [1774] Senping Luo and Juncheng Wei. On lattice hexagonal crystallization for non-monotone potentials. *Journal of Mathematical Physics*, 65(7):

071901, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/071901/3300666/On-lattice-hexagonal-crystallization-for-non->

Mokrzanski:2024:GSE

- [1775] Norbert Mokrzański and Bartosz Pałuba. Ground state energy of Bogoliubov energy functional in the high density limit. *Journal of Mathematical Physics*, 65(7):071902, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/071902/3302454/Ground-state-energy-of-Bogoliubov-energy>.

Marra:2024:HTS

- [1776] Pasquale Marra, Valerio Proietti, and Xiaobing Sheng. Hofstadter–Toda spectral duality and quantum groups. *Journal of Mathematical Physics*, 65(7):071903, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/071903/3304412/Hofstadter-Toda-spectral-duality-and-quantum>.

Miranda:2024:DSM

- [1777] Germán Miranda. Discrete spectrum of the magnetic Laplacian on almost flat magnetic barriers. *Journal of Mathematical Physics*, 65(7):072101, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/072101/3303363/Discrete-spectrum-of-the-magnetic-Laplacian-on>.

Jensen:2024:REM

- [1778] Arne Jensen and Hynek Kovarik. Resolvent expansions of 3D magnetic Schrödinger operators and Pauli operators. *Journal of Mathematical Physics*, 65(7):072102, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/072102/3303886/Resolvent-expansions-of-3D-magnetic-Schrodinger>.

Langrenez:2024:CGK

- [1779] C. Langrenez, D. R. M. Arvidsson-Shukur, and S. De Bièvre. Characterizing the geometry of the Kirkwood–Dirac-positive states. *Journal of Mathematical Physics*, 65(7):072201, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/072201/3302795/Characterizing-the-geometry-of-the-Kirkwood-Dirac>.

Kar:2024:TNG

- [1780] Prem Nigam Kar, Jitendra Prakash, and David E. Roberson. Transitive nonlocal games. *Journal of Mathematical Physics*, 65(7):072202, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/072202/3303649/Transitive-nonlocal-games>.

Blakaj:2024:TPE

- [1781] Vjosa Blakaj and Chokri Manai. Transcendental properties of entropy-constrained sets II. *Journal of Mathematical Physics*, 65(7):072203, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/072203/3303887/Transcendental-properties-of-entropy-constrained>.

Pacheco:2024:FNT

- [1782] Armando J. Cabrera Pacheco and Markus Wolff. Families of non time-symmetric initial data sets and Penrose-like energy inequalities. *Journal of Mathematical Physics*, 65(7):072501, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/072501/3304136/Families-of-non-time-symmetric-initial-data-sets>.

McNutt:2024:LHR

- [1783] D. D. McNutt, R. J. van den Hoogen, and A. A. Coley. Locally-homogeneous Riemann–Cartan geometries with the largest symmetry group. *Journal of Mathematical Physics*, 65(7):072502, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/072502/3304594/Locally-homogeneous-Riemann--Cartan-geometries-with>.

Zhang:2024:AVA

- [1784] Zhen Zhang and Xiong Li. Arithmetic version of Anderson localization for a class of C^2 quasiperiodic Schrödinger operators. *Journal of Mathematical Physics*, 65(7):072701, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/072701/3303650/Arithmetic-version-of-Anderson-localization-for-a>.

Nobe:2024:ESS

- [1785] Atsushi Nobe. Exact solutions to SIR epidemic models via integrable discretization. *Journal of Mathematical Physics*, 65(7):072702, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic).

(electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/072702/3303888/Exact-solutions-to-SIR-epidemic-models-via>.

Huang:2024:HTV

- [1786] Li-Qin Huang and Yi Zhang. Herglotz-type vakonomic dynamics and its Noether symmetry for nonholonomic constrained systems. *Journal of Mathematical Physics*, 65(7):072901, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/072901/3300808/Herglotz-type-vakonomic-dynamics-and-its-Noether>.

Liang:2024:RTE

- [1787] Ying Liang and Hai Zhang. A rigorous theory on electromagnetic diffraction by a planar aperture in a perfectly conducting screen. *Journal of Mathematical Physics*, 65(7):072902, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/072902/3303364/A-rigorous-theory-on-electromagnetic-diffraction>.

Hirpara:2024:EGF

- [1788] Savan Hirpara, Kaushlendra Kumar, Olaf Lechtenfeld, and Gabriel Picanço Costa. Exact gauge fields from anti-de Sitter space. *Journal of Mathematical Physics*, 65(7):072903, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/072903/3304411/Exact-gauge-fields-from-anti-de-Sitter-space>.

Chauhan:2024:QMV

- [1789] T. Chauhan, K. Kalyanaraman, and S. Sircar. Quantifying macrostructures in viscoelastic sub-diffusive flows. *Journal of Mathematical Physics*, 65(7):073101, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/073101/3303597/Quantifying-macrostructures-in-viscoelastic-sub>.

Toth:2024:MOD

- [1790] Gabor Toth. Models of opinion dynamics with random parametrisation. *Journal of Mathematical Physics*, 65(7):073301, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/073301/3304777/Models-of-opinion-dynamics-with-random>.

Faust:2024:FIZ

- [1791] Matthew Faust, Wencai Liu, Rodrigo Matos, Jenna Plute, Jonah Robinson, Yichen Tao, Ethan Tran, and Cindy Zhuang. Floquet isospectrality of the zero potential for discrete periodic Schrödinger operators. *Journal of Mathematical Physics*, 65(7):073501, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/073501/3300333/Floquet-isospectrality-of-the-zero-potential-for>.

Bifulco:2024:SSC

- [1792] P. Bifulco and J. Kerner. Some spectral comparison results on infinite quantum graphs. *Journal of Mathematical Physics*, 65(7):073502, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/073502/3300750/Some-spectral-comparison-results-on-infinite>.

Ji:2024:QCE

- [1793] Un Cig Ji. Quantum continuity equations and quantum evolution systems for white noise operators. *Journal of Mathematical Physics*, 65(7):073503, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/073503/3303798/Quantum-continuity-equations-and-quantum-evolution>.

Maltsev:2024:TDS

- [1794] A. Ya. Maltsev and S. P. Novikov. Topology of dynamical systems on the Fermi surface and galvanomagnetic phenomena in normal metals. *Journal of Mathematical Physics*, 65(7):073504, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/073504/3303818/Topology-of-dynamical-systems-on-the-Fermi-surface>.

Ahbli:2024:GCH

- [1795] Khalid Ahbli, Fouzia El Wassouli, and Zouhair Mouayn. Generalized complex Hermite polynomials with associated nonlinear coherent states. *Journal of Mathematical Physics*, 65(7):073505, July 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/7/073505/3304689/Generalized-complex-Hermite-polynomials-with>.

Zhang:2024:NLB

- [1796] Zaiyun Zhang, Youjun Deng, and Xiping Li. New lower bounds on the radius of spatial analyticity for the higher order nonlinear disper-

sive equation on the real line. *Journal of Mathematical Physics*, 65(8):081501, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081501/3306178/New-lower-bounds-on-the-radius-of-spatial>.

Du:2024:UBS

- [1797] Lili Du, Xu Tang, and Cong Wang. Uniqueness of blowup at singular points for superconductivity problem. *Journal of Mathematical Physics*, 65(8):081502, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081502/3306490/Uniqueness-of-blowup-at-singular-points-for>.

Hou:2024:SGC

- [1798] Songbo Hou and Wenjie Qiao. Solutions to a generalized Chern–Simons Higgs model on finite graphs by topological degree. *Journal of Mathematical Physics*, 65(8):081503, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081503/3306492/Solutions-to-a-generalized-Chern--Simons--Higgs>.

Wu:2024:GAS

- [1799] Chun Wu. Global asymptotic stability in a two-dimensional chemotaxis model arising from tumor invasion. *Journal of Mathematical Physics*, 65(8):081504, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081504/3306491/Global-asymptotic-stability-in-a-two-dimensional>.

Tani:2024:CSFa

- [1800] Atusi Tani and Marie Tani. Classical solvability to the free boundary problem for a foam drainage equation. I. From the top to the interface. *Journal of Mathematical Physics*, 65(8):081505, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081505/3306912/Classical-solvability-to-the-free-boundary-problem>.

Tani:2024:CSFb

- [1801] Atusi Tani and Marie Tani. Classical solvability to the free boundary problem for a foam drainage equation. II. From the interface to the bottom. *Journal of Mathematical Physics*, 65(8):081506, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081506/3306813/Classical-solvability-to-the-free-boundary-problem>.

Wang:2024:KCI

- [1802] Ya guang Wang and Meng Zhao. On Kato's conditions for the inviscid limit of the two-dimensional stochastic Navier–Stokes equation. *Journal of Mathematical Physics*, 65(8):081507, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081507/3308051/On-Kato-s-conditions-for-the-inviscid-limit-of-the>.

Plaza:2024:WPD

- [1803] Ramón G. Plaza and Delyan Zhelyazov. Well-posedness and decay structure of a quantum hydrodynamics system with Bohm potential and linear viscosity. *Journal of Mathematical Physics*, 65(8):081508, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081508/3307961/Well-posedness-and-decay-structure-of-a-quantum>.

Zhang:2024:GWPb

- [1804] Wei Zhang, Jie Fu, Chengchun Hao, and Siqi Yang. Global well-posedness for two-phase fluid motion in the Oberbeck–Boussinesq approximation. *Journal of Mathematical Physics*, 65(8):081509, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081509/3307968/Global-well-posedness-for-two-phase-fluid-motion>.

Alexopoulos:2024:ESD

- [1805] Konstantinos Alexopoulos and Bryn Davies. The effect of singularities and damping on the spectra of photonic crystals. *Journal of Mathematical Physics*, 65(8):081510, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081510/3307964/The-effect-of-singularities-and-damping-on-the>.

Zhou:2024:EUW

- [1806] Shouming Zhou and Jie Xu. The existence and uniqueness of weak solutions for a highly nonlinear shallow-water model with Coriolis effect. *Journal of Mathematical Physics*, 65(8):081511, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081511/3308330/The-existence-and-uniqueness-of-weak-solutions-for>.

Wu:2024:UND

- [1807] Yuanda Wu and Yimin Zhang. Uniqueness and non-degeneracy of solutions for nonlinear fractional Schrödinger equation with perturbation. *Journal of Mathematical Physics*, 65(8):081512, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081512/3308331/Uniqueness-and-non-degeneracy-of-solutions-for->

Dwivedi:2024:AVB

- [1808] Kanchan Dwivedi, Satyanarayana Engu, Venkatramana P. Berke, and Manas Ranjan Sahoo. Asymptotics for viscous Burgers equation under impulsive forcing. *Journal of Mathematical Physics*, 65(8):081513, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081513/3308994/Asymptotics-for-viscous-Burgers-equation-under->

Huang:2024:GSA

- [1809] Hanqi Huang, Guoqiang Ren, and Xing Zhou. Global solvability and asymptotic behavior of solutions for a fully parabolic nutrient taxis system. *Journal of Mathematical Physics*, 65(8):081514, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081514/3309157/Global-solvability-and-asymptotic-behavior-of->

Gao:2024:NTS

- [1810] Yuan Gao and Yuxia Guo. New type of solutions for Schrödinger equations with critical growth. *Journal of Mathematical Physics*, 65(8):081515, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081515/3309136/New-type-of-solutions-for-Schrodinger-equations->

Yang:2024:TWN

- [1811] Yun-Rui Yang, Lu Yang, and Ke-Wang Mu. Traveling waves for a non-local diffusion system with asymmetric kernels and delays. *Journal of Mathematical Physics*, 65(8):081516, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081516/3309548/Traveling-waves-for-a-nonlocal-diffusion-system->

Guo:2024:IFT

- [1812] Hongyan Guo and Hongju Zhao. Integral forms for tensor products of Virasoro vertex operator algebras and their modules. *Journal of Mathematical Physics*, 65(8):081701, August 2024. CODEN JMAPAQ. ISSN

0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081701/3308137/Integral-forms-for-tensor-products-of-Virasoro>.

Campoamor-Stursberg:2024:IRL

- [1813] Rutwig Campoamor-Stursberg, Alessio Marrani, and Michel Rausch de Traubenberg. An infinite-rank Lie algebra associated to $SL(2, \mathbf{R})$ and $SL(2, \mathbf{R})/U(1)$. *Journal of Mathematical Physics*, 65(8):081702, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081702/3308995/An-infinite-rank-Lie-algebra-associated-to-SL-2-R>.

Scalet:2024:FAF

- [1814] Samuel O. Scalet. A faster algorithm for the free energy in one-dimensional quantum systems. *Journal of Mathematical Physics*, 65(8):081901, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081901/3305755/A-faster-algorithm-for-the-free-energy-in-one>.

Corso:2024:NOC

- [1815] Thiago Carvalho Corso and Gero Friesecke. Next-order correction to the Dirac exchange energy of the free electron gas in the thermodynamic limit and generalized gradient approximations. *Journal of Mathematical Physics*, 65(8):081902, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081902/3306677/Next-order-correction-to-the-Dirac-exchange-energy>.

Bensiali:2024:DFT

- [1816] Bouchra Bensiali, Salma Lahbabi, Abdallah Maichine, and Othmane Mirinioui. On density functional theory models for one-dimensional homogeneous materials. *Journal of Mathematical Physics*, 65(8):081903, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/081903/3307967/On-density-functional-theory-models-for-one>.

Scaglione:2024:CBT

- [1817] Lorenzo Scaglione. Comparison between two approaches to classify topological insulators using K -theory. *Journal of Mathematical Physics*, 65(8):081904, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/>

aip/jmp/article/65/8/081904/3308314/Comparison-between-two-approaches-to-classify.

Ishida:2024:ISR

- [1818] Atsuhide Ishida. Inverse scattering for repulsive potential and strong singular interactions. *Journal of Mathematical Physics*, 65(8):082101, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/082101/3307592/Inverse-scattering-for-repulsive-potential-and>.

Knorst:2024:QGM

- [1819] Josué Knorst and Artur O. Lopes. On the quantum Guerra–Morato action functional. *Journal of Mathematical Physics*, 65(8):082102, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/082102/3309145/On-the-quantum-Guerra-Morato-action-functional>.

Leppajarvi:2024:GRG

- [1820] Leevi Leppäjärvi, Ion Nechita, and Ritabrata Sengupta. Generating random Gaussian states. *Journal of Mathematical Physics*, 65(8):082201, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/082201/3307790/Generating-random-Gaussian-states>.

Ferrero:2024:HKC

- [1821] Renata Ferrero, Markus B. Fröb, and William C. C. Lima. Heat kernel coefficients for massive gravity. *Journal of Mathematical Physics*, 65(8):082301, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/082301/3306236/Heat-kernel-coefficients-for-massive-gravity>.

Krasnov:2024:GSS

- [1822] Kirill Krasnov. Geometry of spin(10) symmetry breaking. *Journal of Mathematical Physics*, 65(8):082302, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/082302/3308106/Geometry-of-Spin-10-symmetry-breaking>.

Doan:2024:GSM

- [1823] Thi Anh Thu Doan. Ground states for mass critical two coupled semi-relativistic Hartree equations with attractive interactions. *Journal of Mathematical Physics*, 65(8):082303, August 2024. CODEN JMAPAQ.

ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/082303/3308110/Ground-states-for-mass-critical-two-coupled-semi>.

Balek:2024:RBH

- [1824] Vladimír Balek, Barbora Bezdeková, and Jirí Bicák. Radiation in the black hole-plasma system: Propagation in equatorial plane. *Journal of Mathematical Physics*, 65(8):082501, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/082501/3307232/Radiation-in-the-black-hole-plasma-system>.

Roken:2024:QLF

- [1825] Christian Rören. A quasi-local, functional analytic detection method for stationary limit surfaces of black hole spacetimes. *Journal of Mathematical Physics*, 65(8):082502, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/082502/3309536/A-quasi-local-functional-analytic-detection-method>.

Sanzeni:2024:NCT

- [1826] Giulio Sanzeni. Nonexistence of closed timelike geodesics in Kerr spacetimes. *Journal of Mathematical Physics*, 65(8):082503, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/082503/3309537/Nonexistence-of-closed-timelike-geodesics-in-Kerr>.

Bambusi:2024:BGE

- [1827] Dario Bambusi. Bounds on the growth of energy for particles on the torus with unbounded time dependent perturbations. *Journal of Mathematical Physics*, 65(8):082701, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/082701/3306960/Bounds-on-the-growth-of-energy-for-particles-on>.

Wang:2024:OSM

- [1828] Jiajing Wang, Tongjie Deng, and Kelei Zhang. Orbital stability of multi-peakons for a generalized Dullin–Gottwald–Holm equation. *Journal of Mathematical Physics*, 65(8):082702, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/082702/3307597/Orbital-stability-of-multi-peakons-for-a>.

Holanda:2024:LTT

- [1829] Carlos Eduardo Holanda and Eduardo Santana. A livsic-type theorem and some regularity properties for nonadditive sequences of potentials. *Journal of Mathematical Physics*, 65(8):082703, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/082703/3309578/A-Livsic-type-theorem-and-some-regularity>.

Goto:2024:CTE

- [1830] Shin itiro Goto. Contact topology and electromagnetism: The Weinstein conjecture and Beltrami–Maxwell fields. *Journal of Mathematical Physics*, 65(8):082704, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/082704/3310140/Contact-topology-and-electromagnetism-The>.

Ohmori:2024:GUL

- [1831] Shousuke Ohmori and Yoshihiro Yamazaki. A generalization for ultradiscrete limit cycles in a certain type of max-plus dynamical systems. *Journal of Mathematical Physics*, 65(8):082705, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/082705/3310265/A-generalization-for-ultradiscrete-limit-cycles-in>.

Wang:2024:IRC

- [1832] Weihua Wang and Shixia Xu. Improved regularity criteria for the MHD equations. *Journal of Mathematical Physics*, 65(8):083101, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/083101/3306212/Improved-regularity-criteria-for-the-MHD-equations>.■

Li:2024:ASS

- [1833] Jianguo Li. Asymptotic stability to semi-stationary Boussinesq equations without thermal conduction. *Journal of Mathematical Physics*, 65(8):083102, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/083102/3310264/Asymptotic-stability-to-semi-stationary-Boussinesq>.■

Mashiko:2024:EFD

- [1834] Takuto Mashiko, Yuma Marui, Naoki Maruyama, and Fumihiko Nakano. Eigenvalue fluctuations of 1-dimensional random Schrödinger operators. *Journal of Mathematical Physics*, 65(8):083301, August

2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/083301/3307788/Eigenvalue-fluctuations-of-1-dimensional-random>.

Karmakar:2024:RQS

- [1835] Ujjal Karmakar and Arnab Mandal. Rigidity on quantum symmetry for a certain class of graph C^* -algebras. *Journal of Mathematical Physics*, 65(8):083501, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/083501/3306489/Rigidity-on-quantum-symmetry-for-a-certain-class>.

Novikova:2024:CDS

- [1836] E. M. Novikova. Coherent distributions of the symmetry algebra of spinor regularization generator and hydrogen atom. *Journal of Mathematical Physics*, 65(8):083502, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/083502/3307595/Coherent-distributions-of-the-symmetry-algebra-of>.

Yagdjian:2024:WCB

- [1837] Karen Yagdjian. Waves in cosmological background with static Schwarzschild radius in the expanding universe. *Journal of Mathematical Physics*, 65(8):083503, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/083503/3307596/Waves-in-cosmological-background-with-static>.

Othman:2024:PNS

- [1838] Anas Othman. Properties of near superposition of two squeezed vacuum states. *Journal of Mathematical Physics*, 65(8):083504, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/083504/3307789/Properties-of-near-superposition-of-two-squeezed>.

Kaptsov:2024:GFP

- [1839] E. I. Kaptsov. Group foliations of the β -plane barotropic vorticity equation. *Journal of Mathematical Physics*, 65(8):083505, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/083505/3307966/Group-foliations-of-the-plane-barotropic-vorticity>.

Gerner:2024:EOD

- [1840] Wadim Gerner. Existence of optimal domains for the helicity maximisation problem among domains satisfying a uniform ball condition. *Journal of Mathematical Physics*, 65(8):083506, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/083506/3307965/Existence-of-optimal-domains-for-the-helicity>.

Crampe:2024:GPR

- [1841] Nicolas Crampé, Luc Frappat, Julien Gaboriaud, Eric Ragoucy, Luc Vinet, and Meri Zaimi. Griffiths polynomials of Racah type. *Journal of Mathematical Physics*, 65(8):083507, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/083507/3308026/Griffiths-polynomials-of-Racah-type>.

Yuan:2024:LSS

- [1842] Feng Yuan, Jiguang Rao, Jingsong He, and Yi Cheng. Localized stem structures in quasi-resonant two-soliton solutions for the asymmetric Nizhnik–Novikov–Veselov system. *Journal of Mathematical Physics*, 65(8):083508, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/083508/3308027/Localized-stem-structures-in-quasi-resonant-two>.

Duplij:2024:PSM

- [1843] Steven Duplij. Polyadic sigma matrices. *Journal of Mathematical Physics*, 65(8):083509, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/083509/3308028/Polyadic-sigma-matrices>.

Xia:2024:INF

- [1844] Baoqiang Xia and Ruguang Zhou. Integrable nonlocal finite-dimensional Hamiltonian systems related to the Ablowitz–Kaup–Newell–Segur system. *Journal of Mathematical Physics*, 65(8):083510, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/083510/3308174/Integrable-nonlocal-finite-dimensional-Hamiltonian>.

Nath:2024:ITM

- [1845] Debraj Nath, Niladri Ghosh, and Amlan K. Roy. Information theoretic measures in one-dimensional Dunkl oscillator. *Journal of Mathematical*

Physics, 65(8):083511, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/083511/3308175/Information-theoretic-measures-in-one-dimensional>.

Quer:2024:CSO

- [1846] J. Quer and Enric Ribera Borrell. Connecting stochastic optimal control and reinforcement learning. *Journal of Mathematical Physics*, 65(8):083512, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/083512/3308277/Connecting-stochastic-optimal-control-and>.

Zhang:2024:RRH

- [1847] Yongshuai Zhang, Deqin Qiu, Shoufeng Shen, and Jingsong He. The revised Riemann–Hilbert approach to the Kaup–Newell equation with a non-vanishing boundary condition: Simple poles and higher-order poles. *Journal of Mathematical Physics*, 65(8):083513, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/083513/3309144/The-revised-Riemann--Hilbert-approach-to-the-Kaup>.

Frymark:2024:SAD

- [1848] Dale Frymark, Markus Holzmann, and Vladimir Lotoreichik. Spectral analysis of the Dirac operator with a singular interaction on a broken line. *Journal of Mathematical Physics*, 65(8):083514, August 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/8/083514/3309710/Spectral-analysis-of-the-Dirac-operator-with-a>.

urRahman:2024:SFP

- [1849] Saeed ur Rahman and José Luis Díaz Palencia. Solutions for a flame propagation model in porous media based on Hamiltonian and regular perturbation methods. *Journal of Mathematical Physics*, 65(9):091501, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/091501/3311983/Solutions-for-a-flame-propagation-model-in-porous>.

Li:2024:WSS

- [1850] Weiyang Li, Yuhua Sun, and Jie Xiao. Weak/ stable solutions to p -kirchhoff equation: Only-zero or non-existence. *Journal of Mathematical*

Physics, 65(9):091502, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/091502/3313348/Weak-stable-solutions-to-p-Kirchhoff-equation-Only>.

Cai:2024:GLS

- [1851] Zhongbo Cai, Ying Li, and Jihong Zhao. Global large solutions for the nonlinear dissipative system modeling electro-hydrodynamics. *Journal of Mathematical Physics*, 65(9):091503, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/091503/3313584/Global-large-solutions-for-the-nonlinear>.

Zeng:2024:LDN

- [1852] Shengda Zeng and Moncef Aouadi. Lack of differentiability in nonlocal nonsimple porous thermoelasticity with dual-phase-lag law. *Journal of Mathematical Physics*, 65(9):091504, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/091504/3313585/Lack-of-differentiability-in-nonlocal-nonsimple>.

Chang:2024:GEN

- [1853] Tongkeun Chang and Bumja Jin. Global existence of non-Newtonian incompressible fluid in half space with nonhomogeneous initial-boundary data. *Journal of Mathematical Physics*, 65(9):091505, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/091505/3313591/Global-existence-of-non-Newtonian-incompressible>.

Li:2024:LTB

- [1854] Yeping Li, Bairu Gao, and Zhen Luo. Large-time behavior of the solutions for an inflow problem of the full compressible Navier-Stokes-Korteweg equations. *Journal of Mathematical Physics*, 65(9):091506, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/091506/3313803/Large-time-behavior-of-the-solutions-for-an-inflow>.

Chen:2024:LIN

- [1855] Wenxia Chen, Weixu Ni, and Lixin Tian. Lax integrability and nonlinear dispersive wave phenomenon for the $(3 + 1)$ dimensional Kudryashov-Sinelshchikov equation. *Journal of Mathematical Physics*, 65(9):091507, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658

(electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/091507/3314427/Lax-integrability-and-nonlinear-dispersive-wave>.

Vourdas:2024:RTG

- [1856] A. Vourdas. Rescaling transformations and the Grothendieck bound formalism in a single quantum system. *Journal of Mathematical Physics*, 65(9):092101, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/092101/3312154/Rescaling-transformations-and-the-Grothendieck>.

Exner:2024:VCI

- [1857] Pavel Exner and Jan Pekar. Vertex coupling interpolation in quantum chain graphs. *Journal of Mathematical Physics*, 65(9):092102, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/092102/3312879/Vertex-coupling-interpolation-in-quantum-chain>.

Hislop:2024:EQT

- [1858] Peter D. Hislop, Werner Kirsch, and M. Krishna. Eigenfunctions and quantum transport with applications to trimmed Schrödinger operators. *Journal of Mathematical Physics*, 65(9):092103, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/092103/3313802/Eigenfunctions-and-quantum-transport-with>.

DePalma:2024:CSM

- [1859] Giacomo De Palma, Tristan Klein, and Davide Pastorello. Classical shadows meet quantum optimal mass transport. *Journal of Mathematical Physics*, 65(9):092201, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/092201/3314006/Classical-shadows-meet-quantum-optimal-mass>.

Rao:2024:SMM

- [1860] A. K. Rao and R. P. Malik. Stückelberg-modified massive Abelian 3-form theory: Constraint analysis, conserved charges and BRST algebra. *Journal of Mathematical Physics*, 65(9):092301, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/092301/3311762/Stuckelberg-modified-massive-Abelian-3-form-theory>.

Budd:2024:TRW

- [1861] Timothy Budd and Bart Zonneveld. Topological recursion of the Weil–Petersson volumes of hyperbolic surfaces with tight boundaries. *Journal of Mathematical Physics*, 65(9):092302, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/092302/3312156/Topological-recursion-of-the-Weil-Petersson>.

Bak:2024:HNM

- [1862] Bartłomiej Bak and Jerzy Kijowski. How the non-metricity of the connection arises naturally in the classical theory of gravity. *Journal of Mathematical Physics*, 65(9):092501, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/092501/3312881/How-the-non-metricity-of-the-connection-arises>.

Zhu:2024:VSC

- [1863] Siyao Zhu, Xiaojun Cui, and Tianqi Shi. Viscosity solutions to a Cauchy type problem for timelike Lorentzian eikonal equation. *Journal of Mathematical Physics*, 65(9):092701, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/092701/3311984/Viscosity-solutions-to-a-Cauchy-type-problem-for>.

Peng:2024:SPD

- [1864] Yaxin Peng and Shuzheng Guo. Spectral packing decomposition of CMV matrices through power-law subordinacy. *Journal of Mathematical Physics*, 65(9):092702, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/092702/3313592/Spectral-packing-decomposition-of-CMV-matrices>.

Marsh:2024:DGG

- [1865] Adam Marsh. Defining geometric gauge theory to accommodate particles, continua, and fields. *Journal of Mathematical Physics*, 65(9):092901, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/092901/3314428/Defining-geometric-gauge-theory-to-accommodate>.

Sato:2024:RIM

- [1866] Naoki Sato and Michio Yamada. A reduced ideal MHD system for nonlinear magnetic field turbulence in plasmas with approximate flux surfaces.

Journal of Mathematical Physics, 65(9):093101, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/093101/3311985/A-reduced-ideal-MHD-system-for-nonlinear-magnetic>.

Evnin:2024:GIC

- [1867] Oleg Evnin and Weerawit Horinouchi. A Gaussian integral that counts regular graphs. *Journal of Mathematical Physics*, 65(9):093301, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/093301/3311237/A-Gaussian-integral-that-counts-regular-graphs>.

Zhu:2024:IDD

- [1868] Xiaoming Zhu and Shiqing Mi. Integrable decompositions for the $(2+1)$ -dimensional multi-component Ablowitz–Kaup–Newell–Segur hierarchy and their applications. *Journal of Mathematical Physics*, 65(9):093501, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/093501/3312157/Integrable-decompositions-for-the-2-1-dimensional>.

Winn:2024:EER

- [1869] B. Winn. Extreme eigenvalues of random matrices from Jacobi ensembles. *Journal of Mathematical Physics*, 65(9):093502, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/093502/3313169/Extreme-eigenvalues-of-random-matrices-from-Jacobi>.

Bustos:2024:ZLS

- [1870] Cid Reyes Bustos and Masato Wakayama. Zeta limits for the spectrum of quantum Rabi models. *Journal of Mathematical Physics*, 65(9):093503, September 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/9/093503/3313349/Zeta-limits-for-the-spectrum-of-quantum-Rabi>.

Son:2024:SBM

- [1871] Sung-Jun Son. L^p -solutions to the ES-BGK model of the polyatomic molecules. *Journal of Mathematical Physics*, 65(10):101501, October 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/10/101501/3316839/LP-solutions-to-the-ES-BGK-model-of-the-polyatomic>.

Jin:2024:CEC

- [1872] Chunhua Jin. Critical exponent to a cancer invasion model with non-linear diffusion. *Journal of Mathematical Physics*, 65(10):101502, October 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/10/101502/3316844/Critical-exponent-to-a-cancer-invasion-model-with>.

Hislop:2024:ECT

- [1873] Peter D. Hislop and Éric Soccorsi. Edge currents for the time-fractional, half-plane, Schrödinger equation with constant magnetic field. *Journal of Mathematical Physics*, 65(10):102101, October 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/10/102101/3314813/Edge-currents-for-the-time-fractional-half-plane>.

Bachmann:2024:TSL

- [1874] Sven Bachmann, Richard Froese, and Severin Schraven. Two-sided Lieb–Thirring bounds. *Journal of Mathematical Physics*, 65(10):102102, October 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/10/102102/3315055/Two-sided-Lieb-Thirring-bounds>.

Goto:2024:NGM

- [1875] Yukimi Goto and Tohru Koma. Nambu–Goldstone modes in a lattice Nambu–Jona–Lasinio model with multi flavor symmetries. *Journal of Mathematical Physics*, 65(10):102301, October 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/10/102301/3315371/Nambu--Goldstone-modes-in-a-lattice-Nambu-Jona>.

Zhang:2024:LES

- [1876] Bei Zhang. Lyapunov exponents and stability of a class of measure differential equations. *Journal of Mathematical Physics*, 65(10):102701, October 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/10/102701/3315479/Lyapunov-exponents-and-stability-of-a-class-of>.

Liu:2024:DPA

- [1877] Chunlin Liu and Leiye Xu. Directional Pinsker algebra and its applications. *Journal of Mathematical Physics*, 65(10):102702, October 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658

(electronic). URL <https://pubs.aip.org/aip/jmp/article/65/10/102702/3315486/Directional-Pinsker-algebra-and-its-applications>.

Gao:2024:ESH

- [1878] Shanshan Gao and Bin Ge. Existence of solution to Hadamard–Caputo fractional differential equation with time delay. *Journal of Mathematical Physics*, 65(10):102703, October 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/10/102703/3315763/Existence-of-solution-to-Hadamard-Caputo>.

Figotin:2024:FFD

- [1879] Alexander Figotin. Factorized form of the dispersion relations of a traveling wave tube. *Journal of Mathematical Physics*, 65(10):102704, October 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/10/102704/3316031/Factorized-form-of-the-dispersion-relations-of-a>.

Zhao:2024:WZA

- [1880] Junyilang Zhao and Chunyu Zhou. The Wong–Zakai approximations of invariant manifolds for retarded partial differential equations with multiplicative white noise. *Journal of Mathematical Physics*, 65(10):102705, October 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/10/102705/3315766/The-Wong-Zakai-approximations-of-invariant>.

Ohsawa:2024:SPS

- [1881] Tomoki Ohsawa and Kazuyuki Yagasaki. Semiclassical perturbations of single-degree-of-freedom Hamiltonian systems I: Separatrix splitting. *Journal of Mathematical Physics*, 65(10):102706, October 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/10/102706/3317195/Semiclassical-perturbations-of-single-degree-of>.

Yagasaki:2024:SPS

- [1882] Kazuyuki Yagasaki. Semiclassical perturbations of single-degree-of-freedom Hamiltonian systems II: Nonintegrability. *Journal of Mathematical Physics*, 65(10):102707, October 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/10/102707/3317196/Semiclassical-perturbations-of-single-degree-of>.

Chen:2024:SBT

- [1883] Dengdi Chen and Yan Zheng. Stochastic Burgers type equations with two reflecting walls: Existence, uniqueness and exponential ergodicity. *Journal of Mathematical Physics*, 65(10):103301, October 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/10/103301/3315767/Stochastic-Burgers-type-equations-with-two>.

Hu:2024:NCN

- [1884] Bei-Bei Hu, Ling Zhang, and Zu-Yi Shen. Nonlocal combined nonlinear Schrödinger–Gerdjikov–Ivanov model: Integrability, Riemann–Hilbert problem with simple and double poles, Cauchy problem with step-like initial data. *Journal of Mathematical Physics*, 65(10):103501, October 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/10/103501/3314818/Nonlocal-combined-nonlinear-Schrodinger-Gerdjikov>.

Quitmann:2024:DCM

- [1885] Alexandra Quitmann. Decay of correlations in the monomer-dimer model. *Journal of Mathematical Physics*, 65(10):103502, October 2024. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic). URL <https://pubs.aip.org/aip/jmp/article/65/10/103502/3315380/Decay-of-correlations-in-the-monomer-dimer-model>.

Solovej:2021:SCH

- [1886] Jan Philip Solovej, Rafael Benguria, and Martin Zirnbauer. Special collection in honor of Freeman Dyson. American Institute of Physics Web site, 2021. URL <https://pubs.aip.org/jmp/collection/1381/Special-collection-in-honor-of-Freeman-Dyson>.