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Title word cross-reference

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

$(2 < p < 4)$ [203]. (k, a) [1484]. $(n + 1)$ [870]. (p, k) [971]. (p, q) [1233]. (t_2, t_3) [1170]. $(U_q(\int\sqcap(1, 1)), \iota_{q^{1/2}}(2n))$ [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 [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]. $_{IV}$ [639]. $_n$ [1084]. $_V$ [639]. $A[(\lambda x) + i \tanh(\lambda x)]$ [1505]. A_n [781, 1149]. α [219, 486]. $\alpha - z$ [325]. $\alpha \to 1$ [746]. B [1239, 1479]. B_n [1447]. $\bar{\partial}$ [765]. β [687, 1277, 922]. C^* [1526, 880]. $C^5 \otimes C^5$ [505]. C^∞ [634]. $C_n(1)$ [1498]. $\mathcal{N} = 2$ [510]. $\mathcal{PT}$ [1505]. $\mathrm{Cur}(\mathrm{sl}_2(\mathbf{C}))$ [1314]. D [225, 328, 656, 667, 258, 710, 789]. $\ddot{x} + f(x)\dot{x}^2 + g(x) = 0$ [115, 114, 8, 5, 6]. $\dot{B}^{-1}_{\infty,\infty}$ [731]. E^2 [1322]. E_8 [1108]. $E_{\tau,\eta}gl_3$ [151]. $F(r)$ [1228]. g [1306, 303, 1009]. $\mathrm{gl}(n) \otimes \mathrm{gl}(n)$ [646]. $\mathrm{GL}_q(2)$ [686]. H^2 [1047]. H^s

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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 magnetohydrodynamics 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: Polytropic 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 Constales, 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 Fujiié 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. $\mathrm{SDiff}(S^2)$ 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. $\mathrm{VOA}[M_4]$. *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 Makhlouf. 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. Kozlowski, 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. Krejcirík. 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. CODEN 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] Houssem 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 Mathemat-*

ical 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 Darmois–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, Febru-

ary 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. CO-

DEN 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 $(U_q(\int\sqcap(1,1)), \wr_{q^{1/2}}(2n))$, 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 Rahaman. 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 Saeedinaeeni. 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 Chanho 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.

DAlessandro: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 $\int\updownarrow_2$ 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. Vantzos. 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 nonlocal 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, Shiyou 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 FKG–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.

Odzijewicz:2020:ICQ

[227] A. Odzijewicz 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 Gümral. 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.

Skrypnyk:2020:SVQ

[268] T. Skrypnyk. 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 semclassical 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 Gheteb. 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 Mathe-*

matical 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 Jinge 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 (ad)n(X2)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.

Diaz-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 ringdown 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, October 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. *Jour-*

nal 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. Rafaeli, 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 (2 N). *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] Chuanzhong 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. Pachoł. 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 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] Majdouline 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 condi-

tions. *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 critical 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. CO-

DEN 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 $\mathrm{U}(1)_{B-L}$-extension of the standard model from noncommutative 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 Baloïtcha. 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 Fujiié 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 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 Mathemat-*

ical 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 superlinear 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 E6(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 CPn 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] Yurij 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 R2. *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. Kozlowski, 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.

Filoche: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 cohomotopy 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 Lahoche, 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 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 $\mathcal{W}_{q,t}(\int\!\!\updownarrow(2|1))$. *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 Mathematical 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 Açik 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.

Freistuhler: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 Pawela, 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-P_{IV} and d-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 Bourgine. 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 $\mathrm{gl}(n) \otimes \mathrm{gl}(n)$-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.

Choreno: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) symme-

try. *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. 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] Fereshte Shahbeigi, David Amaro-Alcalá, Zbigniew Puchała, and Karol Zyczkowski. 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 Ruiao 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 Ceniceros, 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 $\mathrm{GL}_q(2)$. *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 RN 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 Esmaeil 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 Bonnemain, 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 Ruviaro. 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 $\dot{B}^{-1}_{\infty,\infty}$. *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 quasilinear 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] Derchyi 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, Septem-

ber 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 Salzmann, and Nilanjana Datta. The $\alpha \to 1$ 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] Chuanzhong 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. Kuetche, 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:AII

[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, October 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. Hypoellipticity 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, November 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. *Jour-*

nal 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 nonlinear 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 multidimensional 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-Mieldzioć, 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 Krejcirík. 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 Heineman 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 R3 with a critical nonlinearity. *Journal of Mathematical Physics*, 63(2):021505, February 2022. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

DAprile: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. $\int\updownarrow_2$-Harish-Chandra modules for $\int\updownarrow_2$[ltimes]$L(4)$. *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, Febru-

ary 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. CO-

DEN 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 Lluis 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 Hassanabadi. 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 R12. *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. CO-

DEN 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:BID

[1033] Asmus K. Bisbo and Joris Van der Jeugt. Bases for infinite dimensional simple $\wr\int\!\!\!\!\surd(1|2n)$-modules respecting the branching $\wr\int\!\!\!\!\surd(1|2n) \supset \}\updownarrow(n)$. *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 Guţă. 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/63/6/063304/2846108/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. Rioseco, 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 mod-

ified 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 Frembs. 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-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 Çayiç. 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-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 $\mathrm{SO}(3)_{\mathrm{p}}$. *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 $\natural_\alpha$-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 $(\mathrm{A})\mathrm{dS}_n$ 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. *Jour-*

nal 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 Mathematical 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. Octions: 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/Octions-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.

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.

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-geostropic 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-geostropic.

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 $K\prime_4$. *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 Mathematical 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 **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 $\int\updownarrow_n$ 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 $\mathcal{O}N$-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 nonholonomic 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 Zegarliński, 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 nonhomogeneous 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, Novem-

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`.

Samprogna:2022:STA

[1253] Rodrigo A. Samprogna 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 $\mathrm{U}_q(D_4^{(3)})$. *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`.

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`.

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.

LaRacuente:2022:QFM

[1263] Nicholas LaRacuente. 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 LaRacuente. 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-*

ematical 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 $\}\updownarrow(1)$. *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 Neguţ. 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 $\mathrm{Cur}(\mathrm{sl}_2(\mathbf{C}))$. *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/64/1/012502/2870555/The-null-distance-encodes-causality.

Mitsopoulos:2023:CFI

[1322] Antonios Mitsopoulos and Michael Tsamparlis. 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`.

Figueroa-OFarrill:2023:LAC

[1334] José Figueroa-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] Delfim 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, Ziying 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:WNS

[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. Célérier. 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 Sjodahl. 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 Ceniceros, Mohamed Elhamdadi, Brendan Magill, and Gabriana 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. Nascimentoa, 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, Vicenţiu 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. Célérier. 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`.

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. Chru'sciel. 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] Wenhu 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 $\natural_\alpha$-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 Makhlouf. 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 noncommutative 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 $A[(\lambda x) + i\tanh(\lambda x)]$. *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. Muarem. 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). 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`.

Solovej:2021:SCH

[1528] 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`.