PHYSICAL REVIEW E **THIRD SERIES, VOLUME 111, NUMBER 3** **MARCH 2025**

Scalable effective electrorheological simulation based on ensembles *(10 pages)* 035408
Zuyang Li, Hua Wei, Shi Liu, Menghan Xia, Bo Guo, Yingzhou Huang, Hua Yu, XiaoFeng Qian, and Weijia Wen

Length-scale dependence of Stokes-Einstein breakdown in active glass-forming liquids *(7 pages)* 035409
Anoop Mutneja and Smarajit Karmakar

Electrostatic interactions between anisotropic particles *(17 pages)* 035410
Harshit Joshi and Anubhab Roy

Equatorial deformation of homogeneous spherical fluid vesicles by a rigid ring *(28 pages)* 035411
Pablo Vázquez-Montejo, Bojan Božič, and Jemal Guven

Migration of an active particle in mixtures of rigid and flexible rings *(8 pages)* 035412
Meng-Yuan Li, Ning Zheng, and Yan-Wei Li

Time-harmonic waves in Korteweg and nematic-Korteweg fluids *(10 pages)* 035413
Patrick E. Farrell and Umberto Zerbinati

Mechanics, Interfaces, and Films

Island formation in heteroepitaxial growth *(13 pages)* 035501
Frederik Munko, Catherine Cruz Luukkonen, Ismael S. S. Carrasco, Fábio D. A. Aarão Reis, and Martin Oettel

Quasiperfect fractional ultrasonic vortices by monolayer transmission metasurfaces *(7 pages)* 035502
Bu-Chen Ping, Jia-Jia Feng, Yan-Chun Luo, Xin-Rui Li, and Da-Jian Wu

Line tension from dual-geometry sessile droplet measurements: Combining contact-angle size-dependence data for axisymmetric and cylindrical droplets to determine the line tension *(12 pages)* 035503
Dmitry V. Tatyanenko and Konstantin D. Apitsin

The editors and referees of PRE find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. E 89, 010001 (2014).

PHYSICAL REVIEW E **THIRD SERIES, VOLUME 111, NUMBER 3** **MARCH 2025**

Two-component lattice Boltzmann model for solute transport in bubbly flows *(21 pages)* 035306
Craig Byrne and Orest Shardt

GenEFT: Understanding statics and dynamics of model generalization via physics-inspired effective theory *(10 pages)* 035307
David D. Baek, Ziming Liu, and Max Tegmark

Comparative analysis of Maxwell solvers for simulation of relativistic harmonic generation in particle-in-cell code *(8 pages)* 035308
H. M. Huddleston, C. R. J. Fitzpatrick, J. P. Kennedy, B. Dromey, and M. Yeung

Efficient numerical approach for modeling coupled electron and nanosecond laser pulse propagation dynamics in dielectric materials *(11 pages)* 035309
Nicolas Bourdineaud, Guillaume Duchateau, and Rodolphe Turpault

Three-dimensional construction of hyperuniform, nonhyperuniform, and antihyperuniform disordered heterogeneous materials and their transport properties via spectral density functions *(16 pages)* 035310
Wenlong Shi, Yang Jiao, and Salvatore Torquato

Lattice Boltzmann equation for convection-diffusion flows with Neumann boundary condition *(12 pages)* 035311
Lin Zheng, Song Zheng, and Qinglan Zhai

Volumetric lattice Boltzmann method for thermal particulate flows with conjugate heat transfer *(20 pages)* 035312
Xiaojie Zhang, Donglei Wang, Qing Li, and Rongzong Huang

Reservoir computing with state-dependent time delay *(10 pages)* 035313
G. O. Danilenko, A. V. Kovalev, D. S. Citrin, A. Locquet, D. Rontani, and E. A. Viktorov

Soft Matter including Polymers, Liquid Crystals, and Granular Materials

Replica theory for the dynamic glass transition of hard spheres with continuous polydispersity *(11 pages)* 035401
Hyonggi Kim and Atsushi Ikeda

Anomalous diffusion in polydisperse granular gases *(7 pages)* 035402
Anna S. Bodrova and Alexander I. Osinsky

Collineations of particles in the Kob-Andersen system *(22 pages)* 035403
V. A. Levashov

Turbulence-to-order transitions in activity-patterned active nematics *(10 pages)* 035404
Cody D. Schimming, C. J. O. Reichhardt, and C. Reichhardt

Friction anisotropy in the sliding motion of polymer microspheres on a compliant rippled surface *(5 pages)* 035405
Ebru Cihan, Hesam Khaksar, Kevin Lubig, Stephan Gräf, Frank A. Müller, and Enrico Gnecco

Spinodal decomposition as a possible void initialization mechanism for spallation in shock melted materials under high strain rates *(8 pages)* 035406
Yutong Yang, Zixiang Yan, Hao Liu, Jingxiang Shen, and Wei Kang

Prigogine-Defay ratio of glassy freezing scales with liquid fragility *(12 pages)* 035407
A. Loidl, P. Lunkenheimer, and K. Samwer

(Continued)

The editors and referees of PRE find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. E 89, 010001 (2014).

PHYSICAL REVIEW E **THIRD SERIES, VOLUME 111, NUMBER 3** **MARCH 2025**

Plasma Physics

Temperature relaxation rates in strongly magnetized plasmas *(17 pages)* 035201
Louis Jose, James C. Welch, III, Timothy D. Tharp, and Scott D. Baalrud

Shapiro steps observed in a two-dimensional Yukawa solid modulated by a one-dimensional vibrational periodic substrate *(10 pages)* 035202
Zhaoye Wang, Nichen Yu, C. Reichhardt, C. J. O. Reichhardt, Ao Xu, Xin Chen, and Yan Feng

Direct laser acceleration of Bethe-Heitler positrons in laser-channel interactions *(14 pages)* 035203
Bertrand Martinez, Robert Babjak, and Marija Vranic

Modulation instability of the ion-acoustic soliton in spin-polarized plasma under Bohm potential *(10 pages)* 035204
A. Rezvani, S. Miraboutalebi, L. Rajaei, and M. R. Sharifian

Lightning as a natural source of synchrotron radiation of x-ray and gamma-ray photons *(14 pages)* 035205
N. I. Petrov

Conservative dielectric functions and electrical conductivities from the multicomponent Bhatnagar-Gross-Krook equation *(16 pages)* 035206
Thomas Chuna and Michael S. Murillo

Nonlinear saturation of the two-plasmon decay instability in magnetized plasmas *(8 pages)* 035207
X. X. Li, R. J. Cheng, Qing Wang, D. J. Liu, S. Y. Lv, Z. M. Huang, S. T. Zhang, Z. J. Chen, Z. Y. Xu, Qiang Wang, Z. J. Liu, L. H. Cao, C. Y. Zheng, and X. T. He

Influence of the two-temperature effect on ionization potential depression in hot dense plasma *(11 pages)* 035208
Qingbo Luo, Xin Liang, Chengliang Lin, Xinlian Zhang, Jianpeng Liu, Cheng Gao, Yong Hou, and Jianmin Yuan

Compact spin-polarized positron acceleration in multilayer microhole-array films *(19 pages)* 035209
Zhen-Ke Dou, Chong Lv, Yousef I. Salamin, Nan Zhang, Feng Wan, Zhong-Feng Xu, and Jian-Xing Li

Electron acceleration in ambient air using tightly focused ultrashort infrared laser beams *(15 pages)* 035210
Marianna Lytova, François Fillion-Gourdeau, Simon Vallières, Sylvain Fourmaux, Stéphane Payeur, Jeffrey Powell, François Légaré, and Steve MacLean

Computational Physics, Machine Learning, and Artificial Intelligence

AI-based computation method for the Eddington factor in the M1-multigroup model *(15 pages)* 035301
G. Radureau, C. Michaut, and A. I. Comport

Nonlinear classification of neural manifolds with contextual information *(8 pages)* 035302
Francesca Mignacco, Chi-Ning Chou, and SueYeon Chung

Multifunctional reservoir computing *(15 pages)* 035303
Yao Du, Haibo Luo, Jianmin Guo, Jinghua Xiao, Yizhen Yu, and Xingang Wang

Towards a foundation model for partial differential equations: Multioperator learning and extrapolation *(18 pages)* 035304
Jingmin Sun, Yuxuan Liu, Zecheng Zhang, and Hayden Schaeffer

Infinite-dimensional next-generation reservoir computing *(13 pages)* 035305
Lyudmila Grigoryeva, Hannah Lim Jing Ting, and Juan-Pablo Ortega

(Continued)

The editors and referees of PRE find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. E 89, 010001 (2014).

PHYSICAL REVIEW E **THIRD SERIES, VOLUME 111, NUMBER 3** **MARCH 2025**

Discrete-time open quantum walks for vertex ranking in graphs *(22 pages)* 034312
Supriyo Dutta

Biological Physics

Evolution and pathogenicity of SARS-CoVs: A microcanonical analysis of receptor-binding motifs *(7 pages)* 034401
Rafael B. Frigori

Direction selection of metachronal waves in hydrodynamic coordination of cilia *(8 pages)* 034402
Rachel R. Bennett

Links regulate deflection fluctuations in the sensory cells of hearing *(19 pages)* 034403
Riccardo Marrocchio and Dáibhid Ó Maoiléidigh

Physical limits on chemical sensing in bounded domains *(25 pages)* 034404
Daniel R. McCusker and David K. Lubensky

Critical transitions in pancreatic islets *(7 pages)* 034405
D. Korošak, S. Postić, A. Stožer, B. Podobnik, and M. Slak Rupnik

Systematic dynamical analysis reveals the hierarchical hematopoietic differentiation *(14 pages)* 034406
Zhuozhen Xue, Qing Hu, Xiaoqi Lu, and Ruiqi Wang

From noisy cell size control to population growth: When variability can be beneficial *(17 pages)* 034407
Arthur Genthon

Interaction network structures in competitive ecosystems *(16 pages)* 034408
David A. Kessler and Nadav M. Shnerb

Fluid Dynamics

Evolution of weak, homogeneous turbulence subject to rotation and stratification:
Comparable wave and nonpropagating components *(19 pages)* 035101
J. F. Scott

Alternative analytical solution of linear Richtmyer-Meshkov-like flows for corrugated shocks driven by a rigid
piston *(12 pages)* 035102
J. G. Wouchuk

Self-organization of spermatozoa via unsteady elastohydrodynamic interactions enhances their swimming speed
and efficiency *(10 pages)* 035103
Nanami Taketoshi, Toshihiro Omori, and Takuji Ishikawa

Synchronization and self-assembly of free capillary spinners *(10 pages)* 035104
Nilgun Sungar, John Sharpe, Loic Ijzerman, and Jack-William Barotta

Synchronization of wave-propelled capillary spinners *(14 pages)* 035105
Jack-William Barotta, Giuseppe Pucci, Eli Silver, Alireza Hooshanginejad, and Daniel M. Harris

Experiments on the thermophoretic force on particles in the transition regime of rarefied flows *(13 pages)* 035106
Rick D. M. Jansen, Ralf R. L. Reinartz, Haoyu Zhu, Rudie P. J. Kunnen, and Herman J. H. Clercx

(Continued)

The editors and referees of PRE find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. E 89, 010001 (2014).

PHYSICAL REVIEW E **THIRD SERIES, VOLUME 111, NUMBER 3** **MARCH 2025**

Extreme events in two coupled chaotic oscillators *(11 pages)* 034214
S. Sudharsan, Tapas Kumar Pal, Dibakar Ghosh, and Jürgen Kurths

Lyapunov functional approach to polarization domains in fiber lasers *(7 pages)* 034215
Konstantin Komarov, Alexander Dmitriev, Andrey Komarov, Luming Zhao, and François Sanchez

Stability and dynamics of massive vortices in two-component Bose-Einstein condensates *(12 pages)* 034216
J. D'Ambroise, W. Wang, C. Ticknor, R. Carretero-González, and P. G. Kevrekidis

Path-integral approach to sparse non-Hermitian random matrices *(17 pages)* 034217
Joseph W. Baron

Tunneling in a Lorenz-like model for an active wave-particle entity *(11 pages)* 034218
Runze Xu and Rahil N. Valani

PART B

Networks and Complex Systems

Spectral statistics of interpolating random circulant matrix and its applications to random circulant graphs *(13 pages)* 034301
Sunidhi Sen, Himanshu Shekhar, and Santosh Kumar

Hyperedge overlap drives synchronizability of systems with higher-order interactions *(13 pages)* 034302
Santiago Lamata-Otín, Federico Malizia, Vito Latora, Mattia Frasca, and Jesús Gómez-Gardeñes

Cyclic random graph models predicting giant molecules in hydrocarbon pyrolysis *(32 pages)* 034303
Perrin E. Ruth, Vincent Dufour-Décieux, Christopher Moakler, and Maria K. Cameron

Delay effect in coevolutionary balance as a higher order interaction *(8 pages)* 034304
M. Ghanbarzadeh Noudehi and G. R. Jafari

Optimal reduction of an epidemic outbreak size via temporary quarantine *(10 pages)* 034305
Eyal Atias and Michael Assaf

Analysis of the inference of ratings and rankings in complex networks using discrete exterior calculus on higher-order networks *(12 pages)* 034306
Juan I. Perotti

Simple model for the transition from local to centralized production *(8 pages)* 034307
Guillermo Benito-Calvino and Pablo Jensen

Network reconstruction may not mean dynamics prediction *(16 pages)* 034308
Zhendong Yu and Haiping Huang

Recovery of activation propagation and self-sustained oscillation abilities in stroke brain networks *(19 pages)* 034309
Yingpeng Liu, Jiao Wu, Kesheng Xu, and Muhua Zheng

Modeling diffusion in networks with communities: A multitype branching process approach *(21 pages)* 034310
Alina Dubovskaya, Caroline B. Pena, and David J. P. O'Sullivan

Community modularity structure promotes the evolution of phase clusters and chimeralike states *(8 pages)* 034311
Dong Yu, Xuening Li, Xueqin Wang, Weifang Huang, Xueyan Hu, and Ya Jia

(Continued)

The editors and referees of PRE find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. E 89, 010001 (2014).

PHYSICAL REVIEW E **THIRD SERIES, VOLUME 111, NUMBER 3** **MARCH 2025**

Optimal form of time-local non-Lindblad master equations *(14 pages)* 034132
Tobias Becker and André Eckardt

Gaussian fluctuations of nonreciprocal systems *(8 pages)* 034133
Sergei Shmakov, Glasha Osipycheva, and Peter B. Littlewood

Nonlinear Dynamics and Chaos

Asymmetric coupling of nonchaotic Rulkov neurons: Fractal attractors, quasimultistability, and final state sensitivity *(15 pages)* 034201
Brandon B. Le

High-order synchronization in identical neurons with asymmetric pulse coupling *(24 pages)* 034202
Abhay and Gaurav Dar

Transport barriers and directed transport in the rational standard nontwist map *(10 pages)* 034203
Rodrigo Simile Baroni, Ricardo Egydio de Carvalho, José Danilo Szezech Junior, and Iberê Luiz Caldas

Experimental evidence of community switching en route to global synchronization *(8 pages)* 034204
Sapna Yadav, Taniya Khatun, Heirtami Paswet, and P. Parmananda

Directed ratchet transport in starlike networks of driven damped pendula by localized symmetry-breaking-inducing excitations *(11 pages)* 034205
R. Chacón, A. Martínez García-Hoz, P. J. Martínez, and D. Durán

Analysis of bifurcation and explosive amplitude death in a pair of oscillators coupled via time-delay connection *(9 pages)* 034206
Keiji Konishi, Koki Yoshida, Yoshiki Sugitani, and Naoyuki Hara

Designing chaotic attractors: A semisupervised approach *(10 pages)* 034207
Tempei Kabayama, Yasuo Kuniyoshi, Kazuyuki Aihara, and Kohei Nakajima

Vortex solitons in quasi-phase-matched photonic crystals with competing quadratic and cubic nonlinearity *(10 pages)* 034208
Zhuo Fan, Wan Liu, Linjia Wang, Wei Peng, Di Wu, Siliu Xu, and Yuan Zhao

Optimizing reaction and transport fluxes in temperature-gradient-driven chemical reaction-diffusion systems *(18 pages)* 034209
Mohammed Loukili, Ludovic Jullien, Guillaume Baffou, and Raphaël Plasson

Suppressing parametric resonance of a hyperloop vehicle using a parametric force *(13 pages)* 034210
Jithu Paul, Karel N. van Dalen, Andrei B. Fărăgău, Rens J. van Leijden, Mouad Ouggaâli, and Andrei V. Metrikine

Dynamical entropy of the separatrix map *(7 pages)* 034211
Ivan I. Shevchenko

Strategy to control synchronized dynamics in swarmalator systems *(11 pages)* 034212
Gourab Kumar Sar, Md Sayeed Anwar, Martin Moriamé, Dibakar Ghosh, and Timoteo Carletti

Long-range paracrine coupling-induced Ca^{2+} patterns in two-dimensional cell networks under inositol 1,4,5-triphosphate-cytosolic Ca^{2+} interaction *(12 pages)* 034213
Thierry Kenne Tiayo, Conrad Bertrand Tabi, Armand Sylvin Etémé, and Timoléon Crépin Kofané

(Continued)

The editors and referees of PRE find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. E 89, 010001 (2014).

PHYSICAL REVIEW E **THIRD SERIES, VOLUME 111, NUMBER 3** **MARCH 2025**

Influence of thermal fluctuations on bosonic correlations and the ac Stark effect in two-level atoms: A superstatistical perspective *(15 pages)* 034116
Jorge David Castaño-Yepes, J. M. Cabrera-Terán, and Cristian Felipe Ramirez-Gutierrez

Quantum percolation on Lieb Lattices *(9 pages)* 034117
W. S. Oliveira, J. Pimentel de Lima, and Raimundo R. dos Santos

Entropy, entanglement, and susceptibility of three qubits near quantum criticality *(12 pages)* 034118
Bastian Castorene, Francisco J. Peña, Ariel Norambuena, Sergio E. Ulloa, Cristobal Araya, and Patricio Vargas

Programmable time crystals from higher-order packing fields *(10 pages)* 034119
R. Hurtado-Gutiérrez, C. Pérez-Espigares, and P. I. Hurtado

Nonequilibrium statistical mechanics revealed by Doob *h* transform and variational autoregressive networks *(15 pages)* 034120
Yixin Zhao, Ying Tang, and Pan Zhang

Non-Gaussian behavior in fractional Laplace motion with drift *(15 pages)* 034121
Wei Wang, Yingjie Liang, Aleksei V. Chechkin, and Ralf Metzler

Persistent exclusion process with time-periodic drive *(14 pages)* 034122
Deepsikha Das and Sakuntala Chatterjee

Structural properties of hyperuniform Voronoi networks *(11 pages)* 034123
Eli Newby, Wenlong Shi, Yang Jiao, Reka Albert, and Salvatore Torquato

Dynamical phase transitions in the nonreciprocal Ising model *(41 pages)* 034124
Yael Avni, Michel Fruchart, David Martin, Daniel Seara, and Vincenzo Vitelli

Critical heat current fluctuations in Curie-Weiss model in and out of equilibrium *(15 pages)* 034125
Krzysztof Ptaszyński and Massimiliano Esposito

Multifractal nonlinearity as a robust estimator of multiplicative cascade dynamics *(20 pages)* 034126
Madhur Mangalam, Aaron D. Likens, and Damian G. Kelty-Stephen

Minimal work protocols for inertial particles in nonharmonic traps *(9 pages)* 034127
Julia Sanders, Marco Baldovin, and Paolo Muratore-Ginanneschi

Generalization of the central limit theorem to critical systems: Revisiting perturbation theory *(15 pages)* 034128
Sankarshan Sahu, Bertrand Delamotte, and Adam Rançon

Impact of stochastic resetting on resource allocation: The case of reallocating geometric Brownian motion *(12 pages)* 034129
Petar Jolakoski, Pece Trajanovski, Arnab Pal, Viktor Stojkoski, Ljupco Kocarev, and Trifce Sandev

Mori-Zwanzig projection operator formalism: Generalized Langevin equation dynamics of a classical system perturbed by an external generalized potential and far from equilibrium *(12 pages)* 034130
Sergei Izvekov

Probability distributions of the order parameter of the O(N) model *(14 pages)* 034131
A. Rançon, B. Delamotte, L. Šaravanja, and I. Balog

(Continued)

The editors and referees of PRE find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. E 89, 010001 (2014).

PHYSICAL REVIEW E **THIRD SERIES, VOLUME 111, NUMBER 3** **MARCH 2025**

ARTICLES

Statistical Physics

Matrix H-theory approach to stock market fluctuations *(13 pages)* 034101
Luan M. T. de Moraes, Antônio M. S. Macêdo, Raydonal Ospina, and Giovani L. Vasconcelos

Nature of spin glass order in physical dimensions *(9 pages)* 034102
Bharadwaj Vedula, M. A. Moore, and Auditya Sharma

Vacancy diffusion and the hydrodynamics of crystals *(23 pages)* 034103
Joël Mabillard and Pierre Gaspard

O(N) $\times$ O(2) scalar models: Including $O(\partial^2)$ corrections in the functional renormalization group analysis *(19 pages)* 034104
Carlos A. Sánchez-Villalobos, Bertrand Delamotte, and Nicolás Wschebor

Dynamic fluctuation-dissipation theory for generalized Langevin equations: Constructive constraints, stability, and realizability *(11 pages)* 034105
Massimiliano Giona, Giuseppe Procopio, and Chiara Pezzotti

Ergodicity breaking in well-behaved generalized Langevin equations *(11 pages)* 034106
Giuseppe Procopio, Chiara Pezzotti, and Massimiliano Giona

Planted vertex cover problem on regular random graphs and nonmonotonic temperature-dependence in the supercooled region *(20 pages)* 034107
Xin-Yi Fan and Hai-Jun Zhou

𝔖 Correction-to-scaling exponent for percolation and the Fortuin-Kasteleyn Potts model in two dimensions *(13 pages)* 034108
Yihao Xu, Tao Chen, Zongzheng Zhou, Jesús Salas, and Youjin Deng

Distributed fixed resources exchanging particles: Phases of an asymmetric exclusion process connected to two reservoirs *(19 pages)* 034109
Sourav Pal, Parna Roy, and Abhik Basu

Stochastic thermodynamic bounds on logical circuit operation *(8 pages)* 034110
Phillip Helms, Songela W. Chen, and David T. Limmer

Effects of kinetic energy on heat fluctuations of passive and active overdamped driven particles *(13 pages)* 034111
Pedro V. Paraguassú, Rui Aquino, and Pablo de Castro

Percolation and jamming in random sequential adsorption of straight k-mers on square, triangular, and cubic lattices *(6 pages)* 034112
Zbigniew Koza and Grzegorz Kondrat

Decomposition of metric tensor in thermodynamic geometry in terms of relaxation timescales *(11 pages)* 034113
Zhen Li and Yuki Izumida

Boosting macroscopic diffusion with local resetting *(12 pages)* 034114
Henry Alston and Thibault Bertrand

Reaction rates in quasiequilibrium states *(13 pages)* 034115
Kamel Ourabah

(Continued)

𝔖 The editors and referees of PRE find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. E 89, 010001 (2014).

PHYSICAL REVIEW E™

For editorial and subscription correspondence,
please see inside front cover
(ISSN: 2470-0045)

PERIODICALS
Postmaster send address changes to:

APS Subscription Services
P.O. Box 41
Annapolis Junction, MD 20701

THIRD SERIES, VOLUME 111, NUMBER 3 PARTS A AND B — ***CONTENTS*** — **MARCH 2025**

The Table of Contents is a total listing of Parts A and B.
Part A consists of pages L032101–034218, and Part B pages 034301–035503.

PART A

LETTERS

Statistical Physics

Induced friction on a probe moving in a nonequilibrium medium *(7 pages)* L032101
Ji-Hui Pei and Christian Maes

Nonlinear Dynamics and Chaos

Transition from alternating stripes to alternating labyrinths in oscillatory media *(6 pages)* L032201
Chunli Huang, Zhen Song, and Zhilin Qu

Networks and Complex Systems

Divergence asymmetry and connected components in a general duplication-divergence graph model *(6 pages)* . . . L032301
Dario Borrelli

Balancing mobility behaviors to avoid global epidemics from local outbreaks *(5 pages)* L032302
Pablo Valgañón, Antonio Brotons, David Soriano-Paños, and Jesús Gómez-Gardeñes

Fluid Dynamics

Single-particle diffraction with a hydrodynamic pilot-wave model *(6 pages)* L033101
Giuseppe Pucci, Antoine Bellaigue, Alessia Cirimele, Giuseppe Alì, and Anand U. Oza

Plasma Physics

Resonance broadening effects of weak turbulence on Earth's radiation belt electrons *(7 pages)* L033201
Xiongdong Yu, Zhigang Yuan, Dedong Wang, Oliver Allanson, and Samuel Hunter

Computational Physics, Machine Learning, and Artificial Intelligence

Assessing high-order effects in feature importance via predictability decomposition *(6 pages)* L033301
Marlis Ontivero-Ortega, Luca Faes, Jesus M. Cortes, Daniele Marinazzo, and Sebastiano Stramaglia

(Continued)

2470-0045(202503)111:3:A;1-4

The editors and referees of PRE find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. E 89, 010001 (2014).