PHYSICAL REVIEW E **THIRD SERIES, VOLUME 97, NUMBER 3** **MARCH 2018**

Tensor network method for reversible classical computation *(13 pages)* 033303
Zhi-Cheng Yang, Stefanos Kourtis, Claudio Chamon, Eduardo R. Mucciolo, and Andrei E. Ruckenstein

Modeling flow and transport in fracture networks using graphs *(9 pages)* 033304
S. Karra, D. O'Malley, J. D. Hyman, H. S. Viswanathan, and G. Srinivasan

Applicability of Kerker preconditioning scheme to the self-consistent density functional theory calculations of inhomogeneous systems *(12 pages)* 033305
Yuzhi Zhou, Han Wang, Yu Liu, Xingyu Gao, and Haifeng Song

Sensitivity of electrospray molecular dynamics simulations to long-range Coulomb interaction models *(13 pages)* 033306
Neil A. Mehta and Deborah A. Levin

Regularized lattice Boltzmann model for immiscible two-phase flows with power-law rheology *(13 pages)* 033307
Yan Ba, Ningning Wang, Haihu Liu, Qiang Li, and Guoqiang He

Entropic lattice Boltzmann model for charged leaky dielectric multiphase fluids in electrified jets *(11 pages)* 033308
Marco Lauricella, Simone Melchionna, Andrea Montessori, Dario Pisignano, Giuseppe Pontrelli, and Sauro Succi

Phase-field-based lattice Boltzmann modeling of large-density-ratio two-phase flows *(14 pages)* 033309
Hong Liang, Jiangrong Xu, Jiangxing Chen, Huili Wang, Zhenhua Chai, and Baochang Shi

Tensor renormalization group with randomized singular value decomposition *(6 pages)* 033310
Satoshi Morita, Ryo Igarashi, Hui-Hai Zhao, and Naoki Kawashima

Realizations of highly heterogeneous collagen networks via stochastic reconstruction for micromechanical analysis of tumor cell invasion *(13 pages)* 033311
Hanqing Nan, Long Liang, Guo Chen, Liyu Liu, Ruchuan Liu, and Yang Jiao

Numerical simulation of three-component multiphase flows at high density and viscosity ratios using lattice Boltzmann methods *(15 pages)* 033312
Reza Haghani Hassan Abadi, Abbas Fakhari, and Mohammad Hassan Rahimian

Local lubrication model for spherical particles within incompressible Navier-Stokes flows *(16 pages)* 033313
B. Lambert, L. Weynans, and M. Bergmann

Towards information-optimal simulation of partial differential equations *(8 pages)* 033314
Reimar H. Leike and Torsten A. Enßlin

ERRATA

Publisher's Note: Negative pressure in shear thickening band of a dilatant fluid [Phys. Rev. E **94**, 062614 (2016)] *(1 page)* ..... 039901(E)
Shin-ichiro Nagahiro and Hiizu Nakanishi

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 97, NUMBER 3** **MARCH 2018**

Revised model for the radiation force exerted by standing surface acoustic waves on a rigid cylinder *(10 pages)*... 033103
Shen Liang and Wang Chaohui

Relation between boundary slip mechanisms and waterlike fluid behavior *(8 pages)*... 033104
Patricia Ternes, Evy Salcedo, and Marcia C. Barbosa

Modeling thermal inkjet and cell printing process using modified pseudopotential and thermal lattice Boltzmann methods *(16 pages)*... 033105
Salman Sohrabi and Yaling Liu

Liquid phase stabilization versus bubble formation at a nanoscale curved interface *(6 pages)*... 033106
Jarrod Schiffbauer and Tengfei Luo

Enhancement of the water flow velocity through carbon nanotubes resulting from the radius dependence of the friction due to electron excitations *(6 pages)*... 033107
J. B. Sokoloff

Dynamic evolution of Rayleigh-Taylor bubbles from sinusoidal, W-shaped, and random perturbations *(10 pages)*... 033108
Zhi-Rui Zhou, You-Sheng Zhang, and Bao-Lin Tian

Scale-similar clustering of heavy particles in the inertial range of turbulence *(7 pages)*... 033109
Taketo Ariki, Kyo Yoshida, Keigo Matsuda, and Katsunori Yoshimatsu

Torque scaling in small-gap Taylor-Couette flow with smooth or grooved wall *(6 pages)*... 033110
Bihai Zhu, Zengqi Ji, Zhengkun Lou, and Pengcheng Qian

Barriers to front propagation in laminar, three-dimensional fluid flows *(7 pages)*... 033111
Minh Doan, J. J. Simons, Katherine Lilienthal, Tom Solomon, and Kevin A. Mitchell

Electrohydrodynamic coalescence of droplets using an embedded potential flow model *(20 pages)*... 033112
M. Garzon, L. J. Gray, and J. A. Sethian

Plasma Physics

Multifrequency Raman amplifiers *(6 pages)*... 033201
Ido Barth and Nathaniel J. Fisch

Solvation suppression of ion recombination in gas discharge afterglow *(7 pages)*... 033202
R. Kh. Amirov, A. V. Lankin, and G. E. Norman

Probing a dusty magnetized plasma with self-excited dust-density waves *(7 pages)*... 033203
Benjamin Tadsen, Franko Greiner, and Alexander Piel

Fully kinetic Biermann battery and associated generation of pressure anisotropy *(5 pages)*... 033204
K. M. Schoeffler, N. F. Loureiro, and L. O. Silva

Computational Physics

Analysis and optimization of population annealing *(12 pages)*... 033301
Christopher Amey and Jonathan Machta

Accelerating simulation for the multiple-point statistics algorithm using vector quantization *(16 pages)*... 033302
Chen Zuo, Zhibin Pan, and Hao Liang

(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 97, NUMBER 3** **MARCH 2018**

Reynolds-number-dependent dynamical transitions on hydrodynamic synchronization modes of externally driven colloids *(12 pages)* 032611
Norihiro Oyama, Kosuke Teshigawara, John Jairo Molina, Ryoichi Yamamoto, and Takashi Taniguchi

Liquid Crystals

Modeling deformation and chaining of flexible shells in a nematic solvent with finite elements on an adaptive moving mesh *(7 pages)* 032701
Andrew DeBenedictis, Timothy J. Atherton, Andrea L. Rodarte, and Linda S. Hirst

N-SmA-SmC phase transitions probed by a pair of elastically bound colloids *(6 pages)* 032702
Muhammed Rasi M, K. P. Zuhail, Arun Roy, and Surajit Dhara

Tunable hybrid optical modes in a bounded cholesteric liquid crystal with a twist defect *(5 pages)* 032703
Maxim V. Pyatnov, Stepan Ya. Vetrov, and Ivan V. Timofeev

Director gliding in a nematic liquid crystal layer: Quantitative comparison with experiments *(11 pages)* 032704
E. Mema, L. Kondic, and L. J. Cummings

Electroclinic effect in the chiral lamellar α phase of a lyotropic liquid crystal *(8 pages)* 032705
Marc D. Harjung and Frank Giesselmann

Films and Interfaces

Radial restricted solid-on-solid and etching interface-growth models *(5 pages)* 032801
Sidiney G. Alves

Granular Materials

Force-chain evolution in a two-dimensional granular packing compacted by vertical tappings *(10 pages)* 032901
Naoki Iikawa, M. M. Bandi, and Hiroaki Katsuragi

Dimension dependence of clustering dynamics in models of ballistic aggregation and freely cooling granular gas *(11 pages)* 032902
Subhajit Paul and Subir K. Das

Solid Mechanics

Local yield stress statistics in model amorphous solids *(13 pages)* 033001
Armand Barbot, Matthias Lerbinger, Anier Hernandez-Garcia, Reinaldo García-García, Michael L. Falk, Damien Vandembroucq, and Sylvain Patinet

Universal avalanche statistics and triggering close to failure in a mean-field model of rheological fracture *(14 pages)* 033002
Jordi Baró and Jörn Davidsen

Fluid Dynamics

Statistical symmetry restoration in fully developed turbulence: Renormalization group analysis of two models *(17 pages)* 033101
N. V. Antonov, N. M. Gulitskiy, M. M. Kostenko, and A. V. Malyshev

Heavy inertial particles in turbulent flows gain energy slowly but lose it rapidly *(6 pages)* 033102
Akshay Bhatnagar, Anupam Gupta, Dhrubaditya Mitra, and Rahul Pandit

(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 97, NUMBER 3** **MARCH 2018**

Universal size properties of a star-ring polymer structure in disordered environments *(10 pages)* 032502
K. Haydukivska and V. Blavatska

Polyelectrolyte brush bilayers in weak interpenetration regime: Scaling theory and molecular dynamics simulations *(8 pages)* 032503
Parth Rakesh Desai, Shayandev Sinha, and Siddhartha Das

Star polymers as unit cells for coarse-graining cross-linked networks *(9 pages)* 032504
Taras Y. Molotilin, Salim R. Maduar, and Olga I. Vinogradova

Engineering single-polymer micelle shape using nonuniform spontaneous surface curvature *(24 pages)* 032505
Brian Moths and T. A. Witten

Filamentary structures that self-organize due to adhesion *(7 pages)* 032506
A. Sengab and R. C. Picu

Tuning relaxation dynamics and mechanical properties of polymer films of identical thickness *(11 pages)* 032507
Marwa Kchaou, Pierre Alcouffe, Sivasurender Chandran, Philippe Cassagnau, Günter Reiter, and Samer Al Akhrass

Depletion interaction between colloids mediated by an athermal polymer blend *(10 pages)* 032508
A. I. Chervanyov

Colloids, Complex Fluids, and Active Matter

Paramagnetic colloids: Chaotic routes to clusters and molecules *(8 pages)* 032601
Hamed Abdi, Rasam Soheilian, Randall M. Erb, and Craig E. Maloney

Soft inclusion in a confined fluctuating active gel *(14 pages)* 032602
Amit Singh Vishen, J.-F. Rupprecht, G. V. Shivashankar, J. Prost, and Madan Rao

Self-driven particles in linear flows and trapped in a harmonic potential *(7 pages)* 032603
Mario Sandoval, Julio C. Hidalgo-Gonzalez, and Jose I. Jimenez-Aquino

Active processes in one dimension *(10 pages)* 032604
Thibaut Demaerel and Christian Maes

Depletion zones and crystallography on pinched spheres *(6 pages)* 032605
Jingyuan Chen, Xiangjun Xing, and Zhenwei Yao

Active Brownian particles near straight or curved walls: Pressure and boundary layers *(9 pages)* 032606
Ayhan Duzgun and Jonathan V. Selinger

Fluctuating nonlinear hydrodynamics of flocking *(8 pages)* 032607
Sunil Kumar Yadav and Shankar P. Das

Temperature effects on drift of suspended single-domain particles induced by the Magnus force *(9 pages)* 032608
S. I. Denisov, T. V. Lyutyy, V. V. Reva, and A. S. Yermolenko

Yielding of a model glass former: An interpretation with an effective system of icosahedra *(12 pages)* 032609
Rhiannon Pinney, Tanniemola B. Liverpool, and C. Patrick Royall

Magnetic susceptibility, nanorheology, and magnetoviscosity of magnetic nanoparticles in viscoelastic environments *(11 pages)* 032610
Patrick Ilg and Apostolos E. A. S. Evangelopoulos

(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 97, NUMBER 3** **MARCH 2018**

Slowdown of surface diffusion during early stages of bacterial colonization *(8 pages)* 032407
T. Vourc'h, H. Peerhossaini, J. Léopoldès, A. Méjean, F. Chauvat, and C. Cassier-Chauvat

Actin filaments growing against an elastic membrane: Effect of membrane tension *(13 pages)* 032408
Raj Kumar Sadhu and Sakuntala Chatterjee

Chemical event chain model of coupled genetic oscillators *(11 pages)* 032409
David J. Jörg, Luis G. Morelli, and Frank Jülicher

Assay based on electrical impedance spectroscopy to discriminate between normal and cancerous mammalian cells *(10 pages)* 032410
Fabián Eduardo Giana, Fabián José Bonetto, and Mariela Inés Bellotti

Asymmetry in cilia configuration induces hydrodynamic phase locking *(10 pages)* 032411
Keiji Okumura, Seiya Nishikawa, Toshihiro Omori, Takuji Ishikawa, and Atsuko Takamatsu

Energy required to pinch a DNA plectoneme *(12 pages)* 032412
Céline Barde, Nicolas Destainville, and Manoel Manghi

How nonuniform contact profiles of T cell receptors modulate thymic selection outcomes *(9 pages)* 032413
Hanrong Chen, Arup K. Chakraborty, and Mehran Kardar

Determination of prestress and elastic properties of virus capsids *(13 pages)* 032414
Ankush Aggarwal

How directional mobility affects coexistence in rock-paper-scissors models *(6 pages)* 032415
P. P. Avelino, D. Bazeia, L. Losano, J. Menezes, B. F. de Oliveira, and M. A. Santos

Modeling persistence of motion in a crowded environment: The diffusive limit of excluding velocity-jump processes *(18 pages)* 032416
Enrico Gavagnin and Christian A. Yates

Encounter times of chromatin loci influenced by polymer decondensation *(8 pages)* 032417
A. Amitai and D. Holcman

Normal stresses in semiflexible polymer hydrogels *(11 pages)* 032418
M. Vahabi, Bart E. Vos, Henri C. G. de Cagny, Daniel Bonn, Gijsje H. Koenderink, and F. C. MacKintosh

Reconstructing free-energy landscapes for nonequilibrium periodic potentials *(6 pages)* 032419
N. J. López-Alamilla, Michael W. Jack, and K. J. Challis

Optimal methylation noise for best chemotactic performance of *E. coli (15 pages)* 032420
Subrata Dev and Sakuntala Chatterjee

Evaluation of bending modulus of lipid bilayers using undulation and orientation analysis *(12 pages)* 032421
Adarsh K. Chaurasia, Andrew M. Rukangu, Michael K. Philen, Gary D. Seidel, and Eric C. Freeman

Effects of nucleosome stability on remodeler-catalyzed repositioning *(19 pages)* 032422
Aaron M. Morgan, Sarah E. LeGresley, Koan Briggs, Gada Al-Ani, and Christopher J. Fischer

Polymers

Electrostatic stiffening and induced persistence length for coassembled molecular bottlebrushes *(13 pages)* 032501
Ingeborg M. Storm, Martien A. Cohen Stuart, Renko de Vries, and Frans A. M. Leermakers

(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 97, NUMBER 3** **MARCH 2018**

Individual heterogeneity generating explosive system network dynamics *(6 pages)* 032311
Pedro D. Manrique and Neil F. Johnson

Critical neural networks with short- and long-term plasticity *(7 pages)* 032312
L. Michiels van Kessenich, M. Luković, L. de Arcangelis, and H. J. Herrmann

Using persistent homology to reveal hidden covariates in systems governed by the kinetic Ising model *(14 pages)* 032313
Gard Spreemann, Benjamin Dunn, Magnus Bakke Botnan, and Nils A. Baas

Renormalization-group study of the Nagel-Schreckenberg model *(8 pages)* 032314
Han Kheng Teoh and Ee Hou Yong

Universality and correlations in individuals wandering through an online extremist space *(7 pages)* 032315
Z. Cao, M. Zheng, Y. Vorobyeva, C. Song, and N. F. Johnson

Complex network view of evolving manifolds *(13 pages)* 032316
Diamantino C. da Silva, Ginestra Bianconi, Rui A. da Costa, Sergey N. Dorogovtsev, and José F. F. Mendes

Sparse dynamical Boltzmann machine for reconstructing complex networks with binary dynamics *(21 pages)* 032317
Yu-Zhong Chen and Ying-Cheng Lai

Detection of intensity bursts using Hawkes processes: An application to high-frequency financial data *(14 pages)* 032318
Marcello Rambaldi, Vladimir Filimonov, and Fabrizio Lillo

Effect of form of obstacle on speed of crowd evacuation *(9 pages)* 032319
Ryosuke Yano

Universal principles governing multiple random searchers on complex networks: The logarithmic growth pattern and the harmonic law *(9 pages)* 032320
Tongfeng Weng, Jie Zhang, Michael Small, Bahareh Harandizadeh, and Pan Hui

PART B

Biological Physics

Post-transcriptional bursting in genes regulated by small RNA molecules *(9 pages)* 032401
Guillermo Rodrigo

Impact of hydrodynamic interactions on protein folding rates depends on temperature *(17 pages)* 032402
Fabio C. Zegarra, Dirar Homouz, Yossi Eliaz, Andrei G. Gasic, and Margaret S. Cheung

Simple and universal model for electron-impact ionization of complex biomolecules *(7 pages)* 032403
Hong Qi Tan, Zhaohong Mi, and Andrew A. Bettiol

Effect of ac electric field on the dynamics of a vesicle under shear flow in the small deformation regime *(20 pages)* 032404
Kumari Priti Sinha and Rochish M. Thaokar

Optimal entrainment of circadian clocks in the presence of noise *(23 pages)* 032405
Michele Monti, David K. Lubensky, and Pieter Rein ten Wolde

Early-warning signals of critical transition: Effect of extrinsic noise *(8 pages)* 032406
Shanshan Qin and Chao Tang

(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 97, NUMBER 3** **MARCH 2018**

Clusters in nonsmooth oscillator networks *(19 pages)* 032213
Rachel Nicks, Lucie Chambon, and Stephen Coombes

Discretization-dependent model for weakly connected excitable media *(12 pages)* 032214
Pedro André Arroyo, Sergio Alonso, and Rodrigo Weber dos Santos

Extreme events and single-pulse spatial patterns observed in a self-pulsing all-solid-state laser *(7 pages)* 032215
Carlos Bonazzola, Alejandro Hnilo, Marcelo Kovalsky, and Jorge Tredicce

Spatiotemporal dynamics of the covariant Lyapunov vectors of chaotic convection *(11 pages)* 032216
M. Xu and M. R. Paul

Floquet states of a kicked particle in a singular potential: Exponential and power-law profiles *(8 pages)* 032217
Sanku Paul and M. S. Santhanam

Hydrodynamic optical soliton tunneling *(8 pages)* 032218
P. Sprenger, M. A. Hoefer, and G. A. El

Directed motion of spheres induced by unbiased driving forces in viscous fluids beyond the Stokes' law regime *(8 pages)* 032219
Jesús Casado-Pascual

Networks and Complex Systems

Algorithmic detectability threshold of the stochastic block model *(14 pages)* 032301
Tatsuro Kawamoto

Exact analytical solution of irreversible binary dynamics on networks *(9 pages)* 032302
Edward Laurence, Jean-Gabriel Young, Sergey Melnik, and Louis J. Dubé

Tuning the overlap and the cross-layer correlations in two-layer networks: Application to a susceptible-infectious-recovered model with awareness dissemination *(13 pages)* 032303
David Juher and Joan Saldaña

Collective conflict resolution in groups on the move *(17 pages)* 032304
Itai Pinkoviezky, Iain D. Couzin, and Nir S. Gov

Optimal stabilization of Boolean networks through collective influence *(9 pages)* 032305
Jiannan Wang, Sen Pei, Wei Wei, Xiangnan Feng, and Zhiming Zheng

Group percolation in interdependent networks *(11 pages)* 032306
Zexun Wang, Dong Zhou, and Yanqing Hu

Master stability functions reveal diffusion-driven pattern formation in networks *(18 pages)* 032307
Andreas Brechtel, Philipp Gramlich, Daniel Ritterskamp, Barbara Drossel, and Thilo Gross

Interplay between cost and benefits triggers nontrivial vaccination uptake *(6 pages)* 032308
Benjamin Steinegger, Alessio Cardillo, Paolo De Los Rios, Jesús Gómez-Gardeñes, and Alex Arenas

Geometric evolution of complex networks with degree correlations *(10 pages)* 032309
Charles Murphy, Antoine Allard, Edward Laurence, Guillaume St-Onge, and Louis J. Dubé

Transition to collective oscillations in finite Kuramoto ensembles *(10 pages)* 032310
Franziska Peter and Arkady Pikovsky

(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 97, NUMBER 3** **MARCH 2018**

Analytical method for analysis of electromagnetic scattering from inhomogeneous spherical structures using duality principles *(9 pages)* 032137
M. Kiani, A. Abdolali, and M. Safari

Modeling long correlation times using additive binary Markov chains: Applications to wind generation time series *(13 pages)* 032138
Juliane Weber, Christopher Zachow, and Dirk Witthaut

Critical properties of unlimited gliding: Unexpected flocking behavior driven by the exchange of information *(7 pages)* 032139
Marta Bigus-Kwiatkowska, Agata Fronczak, and Piotr Fronczak

Frustration-induced internal stresses are responsible for quasilocalized modes in structural glasses *(4 pages)* 032140
Edan Lerner and Eran Bouchbinder

Nonlinear Dynamics and Chaos

Attractor hopping between polarization dynamical states in a vertical-cavity surface-emitting laser subject to parallel optical injection *(13 pages)* 032201
Florian Denis-le Coarer, Ana Quirce, Angel Valle, Luis Pesquera, Miguel A. Rodríguez, Krassimir Panajotov, and Marc Sciamanna

Transition between inverse and direct energy cascades in multiscale optical turbulence *(7 pages)* 032202
V. M. Malkin and N. J. Fisch

Investigation of a chaotic thermostat *(10 pages)* 032203
G. J. Morales

Spatial solitons and stability in the one-dimensional and the two-dimensional generalized nonlinear Schrödinger equation with fourth-order diffraction and parity-time-symmetric potentials *(6 pages)* 032204
C. G. L. Tiofack, F. II Ndzana, A. Mohamadou, and T. C. Kofane

Transition from normal to ballistic diffusion in a one-dimensional impact system *(9 pages)* 032205
André L. P. Livorati, Tiago Kroetz, Carl P. Dettmann, Iberê L. Caldas, and Edson D. Leonel

Information-theoretic model selection for optimal prediction of stochastic dynamical systems from data *(12 pages)* 032206
David Darmon

Distinct collective states due to trade-off between attractive and repulsive couplings *(10 pages)* 032207
K. Sathiyadevi, V. K. Chandrasekar, D. V. Senthilkumar, and M. Lakshmanan

Exponentially decaying interaction potential of cavity solitons *(5 pages)* 032208
Shayesteh Rahmani Anbardan, Cristina Rimoldi, Reza Kheradmand, Giovanna Tissoni, and Franco Prati

Amplitude-dependent topological edge states in nonlinear phononic lattices *(16 pages)* 032209
Raj Kumar Pal, Javier Vila, Michael Leamy, and Massimo Ruzzene

Autoresonant excitation of Bose-Einstein condensates *(9 pages)* 032210
S. V. Batalov, A. G. Shagalov, and L. Friedland

Constructing Hopf bifurcation lines for the stability of nonlinear systems with two time delays *(7 pages)* 032211
Romain Modeste Nguimdo

Dark gap solitons in exciton-polariton condensates in a periodic potential *(5 pages)* 032212
Szu-Cheng Cheng and Ting-Wei Chen

(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 97, NUMBER 3** **MARCH 2018**

Deep neural networks for direct, featureless learning through observation: The case of two-dimensional spin models *(10 pages)* 032119
Kyle Mills and Isaac Tamblyn

Jamming and condensation in one-dimensional driven flow *(10 pages)* 032120
Hyungjoon Soh, Meesoon Ha, and Hawoong Jeong

Limits of the memory coefficient in measuring correlated bursts *(8 pages)* 032121
Hang-Hyun Jo and Takayuki Hiraoka

Sampling rare fluctuations of discrete-time Markov chains *(10 pages)* 032122
Stephen Whitelam

Rare behavior of growth processes via umbrella sampling of trajectories *(15 pages)* 032123
Katherine Klymko, Phillip L. Geissler, Juan P. Garrahan, and Stephen Whitelam

Large-deviation theory for diluted Wishart random matrices *(9 pages)* 032124
Isaac Pérez Castillo and Fernando L. Metz

Nonequilibrium forces following quenches in active and thermal matter *(13 pages)* 032125
Christian M. Rohwer, Alexandre Solon, Mehran Kardar, and Matthias Krüger

Fractional superstatistics from a kinetic approach *(7 pages)* 032126
Kamel Ourabah and Mouloud Tribeche

Brownian motion surviving in the unstable cubic potential and the role of Maxwell's demon *(12 pages)* 032127
Luca Ornigotti, Artem Ryabov, Viktor Holubec, and Radim Filip

Distribution of diameters for Erdős-Rényi random graphs *(8 pages)* 032128
A. K. Hartmann and M. Mézard

Diffusive instabilities in a hyperbolic activator-inhibitor system with superdiffusion *(13 pages)* 032129
Alain Mvogo, Jorge E. Macías-Díaz, and Timoléon Crépin Kofané

Asymmetric simple exclusion process with position-dependent hopping rates: Phase diagram from boundary-layer analysis *(10 pages)* 032130
Sutapa Mukherji

Phase transitions in a system of hard Y-shaped particles on the triangular lattice *(10 pages)* 032131
Dipanjan Mandal, Trisha Nath, and R. Rajesh

Voronoi glass-forming liquids: A structural study *(13 pages)* 032132
C. Ruscher, J. Baschnagel, and J. Farago

Random matrices and condensation into multiple states *(12 pages)* 032133
Sina Sadeghi and Andreas Engel

Non-Markovian dynamics of fermionic and bosonic systems coupled to several heat baths *(12 pages)* 032134
A. A. Hovhannisyan, V. V. Sargsyan, G. G. Adamian, N. V. Antonenko, and D. Lacroix

Relaxation dynamics of closed diffusive systems with infinitesimal Langmuir kinetics *(6 pages)* 032135
Jun Sato and Katsuhiro Nishinari

On the number of Bose-selected modes in driven-dissipative ideal Bose gases *(13 pages)* 032136
Alexander Schnell, Roland Ketzmerick, and André Eckardt

(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 97, NUMBER 3** **MARCH 2018**

ARTICLES

Statistical Physics

Shielding property for thermal equilibrium states in the quantum Ising model *(9 pages)* 032101
N. S. Móller, A. L. de Paula Jr., and R. C. Drumond

Heat transport in oscillator chains with long-range interactions coupled to thermal reservoirs *(9 pages)* 032102
Stefano Iubini, Pierfrancesco Di Cintio, Stefano Lepri, Roberto Livi, and Lapo Casetti

Size effects in finite systems with long-range interactions *(10 pages)* 032103
E. S. Loscar and C. M. Horowitz

Fractal dimension of interfaces in Edwards-Anderson spin glasses for up to six space dimensions *(6 pages)* 032104
Wenlong Wang, M. A. Moore, and Helmut G. Katzgraber

Absorbing phase transitions in deterministic fixed-energy sandpile models *(12 pages)* 032105
Su-Chan Park (박수찬)

Ferromagnetic Potts models with multisite interaction *(7 pages)* 032106
Nir Schreiber, Reuven Cohen, and Simi Haber

Thermal decay of a metastable state: Influence of rescattering on the quasistationary dynamical rate *(10 pages)* ... 032107
M. V. Chushnyakova and I. I. Gontchar

Statistical investigation of avalanches of three-dimensional small-world networks and their boundary and bulk cross-sections *(11 pages)* 032108
M. N. Najafi and H. Dashti-Naserabadi

Mapping of uncertainty relations between continuous and discrete time *(5 pages)* 032109
Davide Chiuchiù and Simone Pigolotti

Derivation of Markov processes that violate detailed balance *(19 pages)* 032110
Julian Lee

Effect of multiplicative noise on stationary stochastic process *(9 pages)* 032112
A. V. Kargovsky, A. Yu. Chikishev, and O. A. Chichigina

Unifying model for random matrix theory in arbitrary space dimensions *(8 pages)* 032113
Giovanni M. Cicuta, Johannes Krausser, Rico Milkus, and Alessio Zaccone

Zero-crossing statistics for non-Markovian time series *(8 pages)* 032114
Markus Nyberg, Ludvig Lizana, and Tobias Ambjörnsson

Least-rattling feedback from strong time-scale separation *(14 pages)* 032115
Pavel Chvykov and Jeremy England

Cooperativity in plastic crystals *(9 pages)* 032116
Marco Pieruccini and Elpidio Tombari

Emergence of nonwhite noise in Langevin dynamics with magnetic Lorentz force *(7 pages)* 032117
Hyun-Myung Chun, Xavier Durang, and Jae Dong Noh

Statistical physics of medical diagnostics: Study of a probabilistic model *(11 pages)* 032118
Alireza Mashaghi and Abolfazl Ramezanpour

(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™

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 97, NUMBER 3 PARTS A AND B — ***CONTENTS*** — **MARCH 2018**

The Table of Contents is a total listing of Parts A and B.
Part A consists of pages 030001–032320, and Part B pages 032401–039901(E).

PART A

EDITORIALS AND ANNOUNCEMENTS

Announcement: The Irwin Oppenheim Award *(1 page)* 030001

RAPID COMMUNICATIONS

Statistical Physics

Efficient thermal diode with ballistic spacer *(5 pages)* ..... 030101(R)
Shunda Chen, Davide Donadio, Giuliano Benenti, and Giulio Casati

Glassy phase in quenched disordered crystalline membranes *(5 pages)* ..... 030102(R)
O. Coquand, K. Essafi, J.-P. Kownacki, and D. Mouhanna

Nonequilibrium two-dimensional Ising model with stationary uphill diffusion *(5 pages)* ..... 030103(R)
Matteo Colangeli, Cristian Giardinà, Claudio Giberti, and Cecilia Vernia

Different approach to the modeling of nonfree particle diffusion *(5 pages)* ..... 030104(R)
Niels Buhl

Nonlinear Dynamics and Chaos

Periodic sequence of stabilized wave segments in an excitable medium *(5 pages)* ..... 030201(R)
V. S. Zykov and E. Bodenschatz

Local box-counting dimensions of discrete quantum eigenvalue spectra: Analytical connection to quantum spectral statistics *(5 pages)* ..... 030202(R)
Jamal Sakhr and John M. Nieminen

Networks and Complex Systems

Inhibition delay increases neural network capacity through Stirling transform *(4 pages)* ..... 030301(R)
Alain Nogaret and Alastair King

Copyright 2018 by American Physical Society

2470-0045(201803)97:3:B;1-5

(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).