

CONTENTS - *Continued*

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 79, NUMBER 4

APRIL 2009

COMMENTS

- Comment on “Ising model on the scale-free network with a Cayley-tree-like structure” (2 *pages*) 048101
Borko D. Stošić and Tatijana Stošić

ERRATA

- Erratum: Dynamics of impacting a bubble by another pulsed-laser-induced bubble: Jetting, fragmentation, and entanglement [Phys. Rev. E **77**, 026304 (2008)] (1 *page*) 049901(E)
Yen-Hung Chen and Lin I
- Erratum: Diversity of critical behavior within a universality class [Phys. Rev. E **77**, 061128 (2008)] (1 *page*) 049902(E)
Volker Dohm
- Erratum: Rippling of polymer nanofibers [Phys. Rev. E **78**, 061804 (2008)] (1 *page*) 049903(E)
Xiang-Fa Wu, Yulia Y. Kostogorova-Beller, Alexander V. Goponenko, Haoqing Hou, and Yuris A. Dzenis

CONTENTS - *Continued*

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 79, NUMBER 4

APRIL 2009

Theory of the lattice Boltzmann equation: Lattice Boltzmann model for axisymmetric flows (<i>12 pages</i>)	046708
Zhaoli Guo, Haifeng Han, Baochang Shi, and Chuguang Zheng	
Applications of computational geometry to the molecular simulation of interfaces (<i>9 pages</i>)	046709
Florencio Balboa Usabiaga and Daniel Duque	
Numerical modeling of the behavior of an elastic capsule in a microchannel flow: The initial motion (<i>17 pages</i>)	046710
Gang Ma, Jinsong Hua, and Hua Li	
Unified approach to split absorbing boundary conditions for nonlinear Schrödinger equations: Two-dimensional case (<i>8 pages</i>)	046711
Jiwei Zhang, Zhenli Xu, and Xiaonan Wu	
ENCORE: An extended contractor renormalization algorithm (<i>5 pages</i>)	046712
A. Fabricio Albuquerque, Helmut G. Katzgraber, and Matthias Troyer	
Lattice Boltzmann model for simulating temperature-sensitive ferrofluids (<i>6 pages</i>)	046713
Xiao-Dong Niu, Hiroshi Yamaguchi, and Keisuke Yoshikawa	
Prediction of binary hard-sphere crystal structures (<i>9 pages</i>)	046714
Laura Filion and Marjolein Dijkstra	

BRIEF REPORTS

Interdisciplinary physics

Dynamical hysteresis phenomena in complex network traffic (<i>4 pages</i>)	047101
Mao-Bin Hu, Xiang Ling, Rui Jiang, Yong-Hong Wu, and Qing-Song Wu	

Chaos and pattern formation

Dynamics of modulated waves in electrical lines with dissipative elements (<i>4 pages</i>)	047201
Fabien II Ndzana, Alidou Mohamadou, and Timoleon Crepin Kofané	
Effect of noise on chaotic scattering (<i>4 pages</i>)	047202
Jesús M. Seoane, Liang Huang, Miguel A. F. Sanjuán, and Ying-Cheng Lai	

Classical physics

Formula for the phase velocity of electromagnetic waves (<i>4 pages</i>)	047601
Shihua Huang, Fengmin Wu, and Bo Hu	
Spherical cloaking with homogeneous isotropic multilayered structures (<i>4 pages</i>)	047602
Cheng-Wei Qiu, Li Hu, Xiaofei Xu, and Yijun Feng	

Computational physics

From multidimensional replica-exchange method to multidimensional multicanonical algorithm and simulated tempering (<i>4 pages</i>)	047701
Ayori Mitsutake and Yuko Okamoto	
Simulational nanoengineering: Molecular dynamics implementation of an atomistic Stirling engine (<i>4 pages</i>)	047702
D. C. Rapaport	

(*Continued*)

Classical physics

Kink motion in a curved Josephson junction (<i>7 pages</i>)	046601
T. Dobrowolski	
Analytic theory of parabolic pulses in dissipative systems with rapidly varying mean-zero dispersion (<i>5 pages</i>)	046602
Brandon G. Bale and J. Nathan Kutz	
Scattering of sine-Gordon breathers on a potential well (<i>11 pages</i>)	046603
B. Piette and W. J. Zakrzewski	
Multipactor radiation analysis within a waveguide region based on a frequency-domain representation of the dynamics of charged particles (<i>9 pages</i>)	046604
B. Gimeno, E. Sorolla, S. Anza, C. Vicente, J. Gil, A. M. Pérez, V. E. Boria, F. J. Pérez-Soler, F. Quesada, A. Álvarez, and D. Raboso	
Modulational instability in two-component discrete media with cubic-quintic nonlinearity (<i>10 pages</i>)	046605
B. B. Baizakov, A. Bouketir, A. Messikh, and B. A. Umarov	
Geometry and stability of dynamical systems (<i>11 pages</i>)	046606
Raffaele Punzi and Mattias N. R. Wohlfarth	
How solitary waves collide in discrete granular alignments (<i>7 pages</i>)	046607
Edgar Ávalos and Surajit Sen	
Two approaches to study essentially nonlinear and dispersive properties of the internal structure of materials (<i>12 pages</i>)	046608
A. V. Porubov, E. L. Aero, and G. A. Maugin	
Group delay of evanescent signals in a waveguide with barrier (<i>5 pages</i>)	046609
Luigi Ragni	

Computational physics

Lattices for the lattice Boltzmann method (<i>18 pages</i>)	046701
Shyam S. Chikatamarla and Iliya V. Karlin	
Threshold-selecting strategy for best possible ground state detection with genetic algorithms (<i>8 pages</i>)	046702
Jörg Lässig and Karl Heinz Hoffmann	
Parallel algorithm for spin and spin-lattice dynamics simulations (<i>8 pages</i>)	046703
Pui-Wai Ma and C. H. Woo	
Shear stress in lattice Boltzmann simulations (<i>14 pages</i>)	046704
Timm Krüger, Fathollah Varnik, and Dierk Raabe	
Nonlinear stresses and temperatures in transient adiabatic and shear flows via nonequilibrium molecular dynamics: Three definitions of temperature (<i>7 pages</i>)	046705
Wm. G. Hoover and C. G. Hoover	
Inexact Picard iterative scheme for steady-state nonlinear diffusion in random heterogeneous media (<i>9 pages</i>)	046706
P. Surya Mohan, Prasanth B. Nair, and Andy J. Keane	
Evolutionary dynamics on graphs: Efficient method for weak selection (<i>10 pages</i>)	046707
Feng Fu, Long Wang, Martin A. Nowak, and Christoph Hauert	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 79, NUMBER 4

APRIL 2009

Numerical simulation of drop retraction after a strain jump (<i>4 pages</i>)	046323
Yuriko Renardy, Michael Renardy, Souad Assighaou, and Lazhar Benyahia	
Instanton theory of Burgers shocks and intermittency (<i>7 pages</i>)	046324
L. Moriconi	
Scaling of the two-point velocity difference along scalar gradient trajectories in fluid turbulence (<i>5 pages</i>)	046325
Lipo Wang	
Steady two-layer flow in narrow channels of variable width (<i>8 pages</i>)	046326
Roger E. Khayat and Guowen Tian	
Plasma physics	
Low-frequency model of breathing oscillations in Hall discharges (<i>11 pages</i>)	046401
Serge Barral and Eduardo Ahedo	
Measurements of H_β Stark central asymmetry and its analysis through standard theory and computer simulations (<i>14 pages</i>)	046402
S. Djurović, M. Ćirišan, A. V. Demura, G. V. Demchenko, D. Nikolić, M. A. Gigosos, and M. Á. González	
Pseudochaos and low-frequency percolation scaling for turbulent diffusion in magnetized plasma (<i>10 pages</i>)	046403
Alexander V. Milovanov	
Hamiltonian stochastic processes induced by successive wave-particle interactions in stimulated Raman scattering (<i>13 pages</i>)	046404
A. Ghizzo, D. Del Sarto, and T. Reville	
Modified Thomson problem (<i>7 pages</i>)	046405
Jerzy Cioslowski	
Simulation of diffuse, constricted-stratified, and constricted modes of a dc discharge in argon: Hysteresis transition between diffuse and constricted-stratified modes (<i>10 pages</i>)	046406
I. A. Shkurenkov, Yu. A. Mankelevich, and T. V. Rakhimova	
Photogeneration of electrons in dust clouds in near space (<i>7 pages</i>)	046407
Mahendra Singh Sodha, Amrit Dixit, and Sweta Srivastava	
Stark broadening of hydrogen lines in low-density magnetized plasmas (<i>7 pages</i>)	046408
J. Rosato, Y. Marandet, H. Capes, S. Ferri, C. Mossé, L. Godbert-Mouret, M. Koubiti, and R. Stamm	
Relativistic collisional current-filamentation instability and two-stream instability in dense plasma (<i>6 pages</i>)	046409
Biao Hao, Z.-M. Sheng, C. Ren, and J. Zhang	
Large Hadron Collider at CERN: Beams generating high-energy-density matter (<i>8 pages</i>)	046410
N. A. Tahir, R. Schmidt, A. Shutov, I. V. Lomonosov, A. R. Piriz, D. H. H. Hoffmann, C. Deutsch, and V. E. Fortov	
Single-cycle strong terahertz pulse generation from a vacuum-plasma interface driven by intense laser pulses (<i>6 pages</i>)	046411
X. G. Dong, Z. M. Sheng, H. C. Wu, W. M. Wang, and J. Zhang	
Wave spectra of two-dimensional dusty plasma solids and liquids (<i>11 pages</i>)	046412
Lu-Jing Hou, Z. L. Mišković, Alexander Piel, and Michael S. Murillo	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 79, NUMBER 4

APRIL 2009

Nature-inspired microfluidic propulsion using magnetic actuation (<i>4 pages</i>)	046304
S. N. Khaderi, M. G. H. M. Baltussen, P. D. Anderson, D. Ioan, J. M. J. den Toonder, and P. R. Onck	
Nonlinear current-voltage characteristics of nanochannels (<i>9 pages</i>)	046305
Gilad Yossifon, Peter Mushenheim, Yu-Chen Chang, and Hsueh-Chia Chang	
Minimalist turbulent boundary layer model (<i>5 pages</i>)	046306
L. Moriconi	
Molecular dynamics of a water jet from a carbon nanotube (<i>7 pages</i>)	046307
Itsuo Hanasaki, Toru Yonebayashi, and Satoyuki Kawano	
Nonequilibrium velocity fluctuations and energy amplification in planar Couette flow (<i>14 pages</i>)	046308
José M. Ortiz de Zárate and Jan V. Sengers	
Numerical prediction of ac electro-osmotic flows around polarized electrodes (<i>18 pages</i>)	046309
Y. K. Suh and S. Kang	
Absolute versus convective helical magnetorotational instability in a Taylor-Couette flow (<i>15 pages</i>)	046310
Jānis Priede and Gunter Gerbeth	
Bubble and droplet motion in binary mixtures: Evaporation-condensation mechanism and Marangoni effect (<i>11 pages</i>)	046311
Akira Onuki	
Energy transfer in anisotropic magnetohydrodynamic turbulence (<i>10 pages</i>)	046312
B. Teaca, M. K. Verma, B. Knaepen, and D. Carati	
Flow around fishlike shapes studied using multiparticle collision dynamics (<i>7 pages</i>)	046313
Daniel A. P. Reid, H. Hildenbrandt, J. T. Padding, and C. K. Hemelrijk	
Point-vortex model for Lagrangian intermittency in turbulence (<i>12 pages</i>)	046314
Mark Peter Rast and Jean-Francois Pinton	
Second sound in bursting freely suspended smectic-A films (<i>10 pages</i>)	046315
Frank Müller, Christian Bohley, and Ralf Stannarius	
Space-time correlations of fluctuating velocities in turbulent shear flows (<i>12 pages</i>)	046316
Xin Zhao and Guo-Wei He	
Hydrodynamic interactions between two semiflexible inextensible filaments in Stokes flow (<i>14 pages</i>)	046317
Y.-N. Young	
Three-dimensional computational modeling of multiple deformable cells flowing in microvessels (<i>14 pages</i>)	046318
Sai K. Doddi and Prosenjit Bagchi	
Influence of helicity on the Kolmogorov regime in fully developed turbulence (<i>10 pages</i>)	046319
E. Jurčíšínová, M. Jurčíšin, and R. Remecký	
Statistical dynamo theory: Mode excitation (<i>13 pages</i>)	046320
P. Hoyng	
Attachment and detachment rate distributions in deep-bed filtration (<i>12 pages</i>)	046321
Hsiang-Ku Lin, Leonid P. Pryadko, Sharon Walker, and Roya Zandi	
Reynolds number effects on wavelet components of self-preserving turbulent structures (<i>11 pages</i>)	046322
Akira Rinoshika and Yu Zhou	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 79, NUMBER 4

APRIL 2009

Characterizing synchronization in time series using information measures extracted from symbolic representations (<i>9 pages</i>)	046207
Roberto Monetti, Wolfram Bunk, Thomas Aschenbrenner, and Ferdinand Jamitzky	
Entropy estimation of very short symbolic sequences (<i>10 pages</i>)	046208
Annick Lesne, Jean-Luc Blanc, and Laurent Pezard	
Synchronous regimes in ensembles of coupled Bonhoeffer–van der Pol oscillators (<i>8 pages</i>)	046209
Alexey K. Kryukov, Grigory V. Osipov, Andrey V. Polovinkin, and Jürgen Kurths	
Asymmetry-induced effects in coupled phase-oscillator ensembles: Routes to synchronization (<i>9 pages</i>)	046210
Jane H. Sheeba, V. K. Chandrasekar, Aneta Stefanovska, and Peter V. E. McClintock	
Long-time saturation of the Loschmidt echo in quantum chaotic billiards (<i>5 pages</i>)	046211
Martha Gutiérrez and Arseni Goussev	
Semiclassical theory for decay and fragmentation processes in chaotic quantum systems (<i>16 pages</i>)	046212
Martha Gutiérrez, Daniel Waltner, Jack Kuipers, and Klaus Richter	
Reverse horseshoe and spiral templates in an erbium-doped fiber laser (<i>6 pages</i>)	046213
Javier Used and Juan Carlos Martín	
Controlling chemical oscillations in heterogeneous Belousov-Zhabotinsky gels via mechanical strain (<i>12 pages</i>)	046214
Victor V. Yashin, Krystyn J. Van Vliet, and Anna C. Balazs	
Diagnosis of spatiotemporal chaos in wave envelopes of a nematic electroconvection pattern (<i>20 pages</i>)	046215
G. Dangelmayr, G. Acharya, J. T. Gleeson, I. Oprea, and J. Ladd	
Synchronization and spatiotemporal patterns in coupled phase oscillators on a weighted planar network (<i>9 pages</i>)	046216
Yuki Kagawa and Atsuko Takamatsu	
Self-sustained collective oscillation generated in an array of nonoscillatory cells (<i>11 pages</i>)	046217
Yue Ma and Kenichi Yoshikawa	
Feedback control of subcritical Turing instability with zero mode (<i>11 pages</i>)	046218
A. A. Golovin, Y. Kanevsky, and A. A. Nepomnyashchy	
Influence of passive elements on the dynamics of oscillatory ensembles of cardiac cells (<i>13 pages</i>)	046219
V. S. Petrov, G. V. Osipov, and J. A. K. Suykens	
Spin squeezing as an indicator of quantum chaos in the Dicke model (<i>7 pages</i>)	046220
Lijun Song, Dong Yan, Jian Ma, and Xiaoguang Wang	
Delay and periodicity (<i>9 pages</i>)	046221
S. Yanchuk and P. Perlikowski	
Fluid dynamics	
Evaporation and fluid dynamics of a sessile drop of capillary size (<i>16 pages</i>)	046301
L. Yu. Barash, T. P. Bigioni, V. M. Vinokur, and L. N. Shchur	
Mean-field dynamos in random Arnold-Beltrami-Childress and Roberts flows (<i>7 pages</i>)	046302
Nathan Kleeorin, Igor Rogachevskii, Dmitry Sokoloff, and Dmitry Tomin	
Adhesion properties of chain-forming ferrofluids (<i>8 pages</i>)	046303
Sérgio A. Lira and José A. Miranda	

(Continued)