

CONTENTS - *Continued*

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 80, NUMBER 1

JULY 2009

Aerodynamic performance due to forewing and hindwing interaction in gliding dragonfly flight (<i>4 pages</i>)	017302
Jie Zhang and Xi-Yun Lu	

Classical physics

Surface magnetoinductive breathers in two-dimensional magnetic metamaterials (<i>4 pages</i>)	017601
Maria Eleftheriou, Nikos Lazarides, George P. Tsironis, and Yuri S. Kivshar	

ERRATA

Erratum: Critical wetting transitions in two-dimensional systems subject to long-ranged boundary fields [Phys. Rev. E 79 , 041144 (2009)] (<i>1 page</i>)	019901(E)
A. Drzewiński, A. Maciołek, A. Barasiński, and S. Dietrich	
Erratum: Fixed points and boundary layers in asymmetric simple exclusion processes [Phys. Rev. E 79 , 041140 (2009)] (<i>1 page</i>)	019902(E)
Sutapa Mukherji	
Erratum: DNA unhooking from a single post as a deterministic process: Insights from translocation modeling [Phys. Rev. E 79 , 031928 (2009)] (<i>1 page</i>)	019903(E)
Nabil Laachi, Jaeseol Cho, and Kevin D. Dorfman	
Publisher's Note: Nonintersecting Brownian interfaces and Wishart random matrices [Phys. Rev. E 79 , 061117 (2009)] (<i>1 page</i>)	019904(E)
Céline Nadal and Satya N. Majumdar	

CONTENTS - *Continued*

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 80, NUMBER 1

JULY 2009

Electromagnetic interaction of arbitrary radial-dependent anisotropic spheres and improved invisibility for nonlinear-transformation-based cloaks (<i>9 pages</i>)	016604
Cheng-Wei Qiu, Andrey Novitsky, Hua Ma, and Shaobo Qu	
Driven and damped double sine-Gordon equation: The influence of internal modes on the soliton ratchet mobility (<i>8 pages</i>)	016605
Niurka R. Quintero, R. Alvarez-Nodarse, and Franz G. Mertens	
Soliton-potential interaction in the ϕ^4 model (<i>7 pages</i>)	016606
Ensieh Hakimi and Kurosh Javidan	
Computational physics	
Theoretical and numerical study of axisymmetric lattice Boltzmann models (<i>7 pages</i>)	016701
Haibo Huang and Xi-Yun Lu	
Numerical simulation of fluid flow and heat transfer inside a rotating disk-cylinder configuration by a lattice Boltzmann model (<i>9 pages</i>)	016702
Sheng Chen, Jonas Tölke, and Manfred Krafczyk	
Numerical method for evolving the dipolar projected Gross-Pitaevskii equation (<i>16 pages</i>)	016703
P. B. Blakie, C. Ticknor, A. S. Bradley, A. M. Martin, M. J. Davis, and Y. Kawaguchi	
Joint use of the Weniger transformation and hyperasymptotics for accurate asymptotic evaluations of a class of saddle-point integrals. II. Higher-order transformations (<i>15 pages</i>)	016704
Riccardo Borghi	
Simple and robust solver for the Poisson-Boltzmann equation (<i>10 pages</i>)	016705
M. Baptista, R. Schmitz, and B. Dünweg	
Canonical transforms and the efficient integration of quantum mechanical wave equations (<i>14 pages</i>)	016706
Heiko Bauke and Christoph H. Keitel	

BRIEF REPORTS

Interdisciplinary physics

Information filtering based on transferring similarity (<i>4 pages</i>)	017101
Duo Sun, Tao Zhou, Jian-Guo Liu, Run-Ran Liu, Chun-Xiao Jia, and Bing-Hong Wang	
Searching method through biased random walks on complex networks (<i>4 pages</i>)	017102
Sungmin Lee, Soon-Hyung Yook, and Yup Kim	

Chaos and pattern formation

Level statistics for nearly integrable systems (<i>4 pages</i>)	017201
A. Y. Abul-Magd	
Splitting instability of cellular structures in the Ginzburg-Landau model under feedback control (<i>4 pages</i>)	017202
Hidetsugu Sakaguchi	

Fluid dynamics

Alignment of velocity and vorticity and the intermittent distribution of helicity in isotropic turbulence (<i>4 pages</i>)	017301
Yeontaek Choi, Byung-Gu Kim, and Changhoon Lee	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 80, NUMBER 1

JULY 2009

Dynamical origins for non-Gaussian vorticity distributions in turbulent flows (<i>6 pages</i>)	016316
Michael Wilczek and Rudolf Friedrich	
Droplet motion in microfluidic networks: Hydrodynamic interactions and pressure-drop measurements (<i>10 pages</i>)	016317
D. A. Sessoms, M. Belloul, W. Engl, M. Roche, L. Courbin, and P. Panizza	
Plasma physics	
Detailed particle-in-cell simulations on the transport of a relativistic electron beam in plasmas (<i>9 pages</i>)	016401
Anupam Karmakar, Naveen Kumar, Alexander Pukhov, O. Polomarov, and Gennady Shvets	
Interaction of fast charged projectiles with two-dimensional electron gas: Interaction and collisional-damping effects (<i>14 pages</i>)	016402
Hrachya B. Nersisyan and Amal K. Das	
Instability of the ionization-absorption balance in a complex plasma at ion time scales (<i>6 pages</i>)	016403
D. Else, R. Kompaneets, and S. V. Vladimirov	
Characteristics of relativistic electron mirrors generated by an ultrashort nonadiabatic laser pulse from a nanofilm (<i>12 pages</i>)	016404
Victor V. Kulagin, Vladimir A. Cherepenin, Yuri V. Gulyaev, Vladimir N. Kornienko, Ki Hong Pae, Victor V. Valuev, Jongmin Lee, and Hyyong Suk	
Temporal and spatial evolution of Si atoms in plasmas produced by a nanosecond laser ablating silicon carbide crystals (<i>6 pages</i>)	016405
Ming Chen, Xiangdong Liu, Mingwen Zhao, Chuansong Chen, and Baoyuan Man	
Linearly polarized superluminal electromagnetic solitons in cold relativistic plasmas (<i>6 pages</i>)	016406
Vikrant Saxena, Abhijit Sen, and Predhiman Kaw	
Pressure-driven, resistive magnetohydrodynamic interchange instabilities in laser-produced high-energy-density plasmas (<i>5 pages</i>)	016407
C. K. Li, J. A. Frenje, R. D. Petrasso, F. H. Séguin, P. A. Amendt, O. L. Landen, R. P. J. Town, R. Betti, J. P. Knauer, D. D. Meyerhofer, and J. M. Soures	
Energetic ion, atom, and molecule reactions and excitation in low-current H ₂ discharges: Spatial distributions of emissions (<i>12 pages</i>)	016408
Z. Lj. Petrović and A. V. Phelps	
Interaction of an ultrashort laser pulse and relativistic electron beam in a corrugated plasma channel (<i>15 pages</i>)	016409
J. P. Palastro and T. M. Antonsen	
Classical physics	
Nonparametric estimation of the heterogeneity of a random medium using compound Poisson process modeling of wave multiple scattering (<i>9 pages</i>)	016601
Nicolas Le Bihan and Ludovic Margerin	
Buckling transition and boundary layer in non-Euclidean plates (<i>18 pages</i>)	016602
Efi Efrati, Eran Sharon, and Raz Kupferman	
Soliton generation and multiple phases in dispersive shock and rarefaction wave interaction (<i>5 pages</i>)	016603
M. J. Ablowitz, D. E. Baldwin, and M. A. Hoefer	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 80, NUMBER 1

JULY 2009

Chaotic advection in blood flow (7 pages)	016213
A. B. Schelin, Gy. Károlyi, A. P. S. de Moura, N. A. Booth, and C. Grebogi	
Decay of Loschmidt echo in a Bose-Einstein condensate at a dynamical phase transition (9 pages)	016214
Qiang Zheng, Wen-ge Wang, Pinquan Qin, Ping Wang, Xiaoping Zhang, and Zhongzhou Ren	
Fluid dynamics	
Theory of the Maxwell pressure tensor and the tension in a water bridge (7 pages)	016301
A. Widom, J. Swain, J. Silverberg, S. Sivasubramanian, and Y. N. Srivastava	
Magnetic particle motion in a Poiseuille flow (12 pages)	016302
J. W. Haverkort, S. Kenjereš, and C. R. Kleijn	
Self-propelled motion of a droplet induced by Marangoni-driven spreading (7 pages)	016303
Yong-Jun Chen, Yuko Nagamine, and Kenichi Yoshikawa	
Effect of aspect ratio on transverse diffusive broadening: A lattice Boltzmann study (9 pages)	016304
S. G. Ayodele, F. Varnik, and D. Raabe	
Quasilinear regime and rare-event tails of decaying Burgers turbulence (31 pages)	016305
P. Valageas	
Effective surface viscosities of a particle-laden fluid interface (7 pages)	016306
S. V. Lishchuk and I. Halliday	
Dynamics of nonspherical capsules in shear flow (12 pages)	016307
Prosenjit Bagchi and R. Murthy Kalluri	
Saffman-Taylor instability for generalized Newtonian fluids (8 pages)	016308
S. Mora and M. Manna	
Approach to steady motion of a plate moving in a free-molecular gas under a constant external force (13 pages)	016309
Kazuo Aoki, Tetsuro Tsuji, and Guido Cavallaro	
Hierarchical transport networks optimizing dynamic response of permeable energy-storage materials (10 pages)	016310
Robert H. Nilson and Stewart K. Griffiths	
Experimental determination of heat transfer coefficient in the slip regime and its anomalously low value (8 pages)	016311
Anwar Demsis, Bhaskar Verma, S. V. Prabhu, and Amit Agrawal	
Strong intrinsic mixing in vortex magnetic fields (6 pages)	016312
James E. Martin, Lauren Shea-Rohwer, and Kyle J. Solis	
Lagrangian-averaged model for magnetohydrodynamic turbulence and the absence of bottlenecks (11 pages)	016313
Jonathan Pietarila Graham, Pablo D. Mininni, and Annick Pouquet	
Miscible ferrofluid patterns in a radial magnetic field (9 pages)	016314
Ching-Yao Chen, Y.-S. Yang, and José A. Miranda	
Microcolumn formation between electrodes in a narrow channel from metallic colloidal suspension through induced-charge electrophoresis (5 pages)	016315
Hideyuki Sugioka	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 80, NUMBER 1

JULY 2009

State-variable friction for the Burridge-Knopoff model (<i>10 pages</i>)	016113
Ian Clancy and David Corcoran	
Analysis of community structure in networks of correlated data (<i>5 pages</i>)	016114
Sergio Gómez, Pablo Jensen, and Alex Arenas	
Role of friction in the mechanics of nonbonded fibrous materials (<i>5 pages</i>)	016115
Carine Barbier, Rémy Dendievel, and David Rodney	
Scaling of noisy fluctuations in complex networks and applications to network prediction (<i>6 pages</i>)	016116
Wen-Xu Wang, Qingfei Chen, Liang Huang, Ying-Cheng Lai, and Mary Ann F. Harrison	
Influence of reciprocal edges on degree distribution and degree correlations (<i>11 pages</i>)	016117
Vinko Zlatić and Hrvoje Štefančić	
Benchmarks for testing community detection algorithms on directed and weighted graphs with overlapping communities (<i>8 pages</i>)	016118
Andrea Lancichinetti and Santo Fortunato	
Chaos and pattern formation	
Parameter and state estimation of experimental chaotic systems using synchronization (<i>17 pages</i>)	016201
John C. Quinn, Paul H. Bryant, Daniel R. Creveling, Sallee R. Klein, and Henry D. I. Abarbanel	
Pattern formation and boundary effect in dielectric barrier glow discharge (<i>5 pages</i>)	016202
Xiaoxi Duan, Jiting Ouyang, Xiaofei Zhao, and Feng He	
Transition probability from matter-wave soliton to chaos (<i>6 pages</i>)	016203
Qianquan Zhu, Wenhua Hai, and Shiguang Rong	
Dependence of entanglement dynamics on the global classical dynamical regime (<i>7 pages</i>)	016204
N. N. Chung and L. Y. Chew	
Violation of hyperbolicity in a diffusive medium with local hyperbolic attractor (<i>11 pages</i>)	016205
Pavel V. Kuptsov and Sergey P. Kuznetsov	
Lyapunov instability of rough hard-disk fluids (<i>11 pages</i>)	016206
Jacobus A. van Meel and Harald A. Posch	
Reduction of noise of large amplitude through adaptive neighborhoods (<i>8 pages</i>)	016207
M. Eugenia Mera and Manuel Morán	
From Granger causality to long-term causality: Application to climatic data (<i>11 pages</i>)	016208
Dmitry A. Smirnov and Igor I. Mokhov	
Effects of an oscillating field on magnetic domain patterns: Emergence of concentric-ring patterns surrounding a strong defect (<i>6 pages</i>)	016209
Kazue Kudo	
Diffusion and localization for the Chirikov typical map (<i>10 pages</i>)	016210
Klaus M. Frahm and Dima L. Shepelyansky	
Control of stochastic multistable systems: Experimental demonstration (<i>6 pages</i>)	016211
B. K. Goswami, S. Euzzor, K. Al Naimee, A. Geltrude, R. Meucci, and F. T. Arecchi	
Design of coupling for synchronization of chaotic oscillators (<i>8 pages</i>)	016212
Ioan Grosu, Ranjib Banerjee, Prodyot K. Roy, and Syamal K. Dana	

(Continued)