

PHYSICAL REVIEW E_{TM}

STATISTICAL, NONLINEAR, AND SOFT MATTER PHYSICS

EDITORIAL BOARD

Term ending 31 December 2012

Editors
GARY S. GREST
 (Sandia National Laboratories)
MARGARET MALLOY
 (APS Editorial Office)
Managing Editor
DIRK JAN BUKMAN
 (APS Editorial Office)

Associate Editors
ALEX ARENAS
 (Universitat Rovira i Virgili)
RALF BUNDSCHUH
 (The Ohio State University)
RONALD DICKMAN
 (Universidade Federal de Minas Gerais)
BURKHARD DUENWEG
 (Max-Planck-Institut für Polymerforschung)
BRUNO ECKHARDT
 (Philipps-Universität Marburg)
ANTAL JÁKLI
 (Kent State University)
BRANT M. JOHNSON
 (Brookhaven National Laboratory)
JULIAN D. MAYNARD
 (Pennsylvania State University)
ANTONIO POLITI
 (University of Aberdeen)
Senior Assistant Editors
MARGARET FOSTER
THOMAS PATTARD
Assistant Editors
JILL M. GARGANO
VALERIE L. MILLER
JIHANE MIMIH
HERNAN D. ROZENFELD
Senior Editorial Assistant
TERRE ARENA

R. ALBERT Interdisciplinary Physics
 R. HOLYST Liquid Crystals, Complex Fluids
 M. A. MUÑOZ Nonequilibrium Statistical Mechanics
 P. D. OLMSTED Complex Fluids
 H. PLEINER Liquid Crystals, Polymers
 H. SCHIESSEL Polymer Physics, Biological Physics
 T. TÉL Chaos, Dynamical Systems
 G. C. L. WONG Biological Physics

Term ending 31 December 2013

I. ARANSON Granular Systems, Pattern Formation
 T. ASTE Complex Systems, Granular Materials, Networks
 D. BEN-AVRAHAM Statistical Mechanics
 D. DHAR Statistical Physics
 R. E. ECKE Fluid Dynamics
 A. Y. GROSBERG Biophysics, Polymers
 D. M. KROLL Computational Physics, Complex Fluids
 M. MARSILI Statistical Physics, Econophysics
 F. RITORT Biophysics, Nonequilibrium Phenomena,
 Disordered Systems
 M. G. ROSENBLUM Dynamical Physics
 R. RUBINSTEIN Turbulence
 D. L. SHEPELYANSKY Classical and Quantum Chaos
 Z. Q. ZHANG Waves, Classical Physics

Term ending 31 December 2014

P. C. BRESSLOFF Biophysics, Neuroscience,
 Nonlinear Phenomena
 I. BREVIK Classical Physics, Electrodynamics
 Y.-C. LAI Nonlinear Dynamics, Chaos, Complex Systems
 K. LINDENBERG Statistical and Stochastic Physics
 A. PUMIR Turbulence, Fluids
 P. K. SHUKLA Plasma Physics
 J. E. S. SOCOLAR Statistical Mechanics, Complex Systems
 R. STANNARIUS Liquid Crystals, Granular Materials
 P. B. WARREN Statistical and Soft Matter Physics,
 Systems Biology
 P. ZIHERL Biological and Soft Matter Physics

American Physical Society

Officers

President ROBERT L. BYER
President-Elect MICHAEL S. TURNER
Vice-President MALCOLM R. BEASLEY
Past President BARRY C. BARISH
Editor in Chief GENE D. SPROUSE
Treasurer and Publisher JOSEPH W. SERENE
Executive Officer KATE P. KIRBY

One Physics Ellipse
 College Park, MD 20740-3844

APS Editorial Office

Directors

Editorial DANIEL T. KULP
Journal Information Systems MARK D. DOYLE
Journal Operations CHRISTINE M. GIACCONE

1 Research Road
 Ridge, NY 11961-2701
 Phone: (631) 591-4050 Fax: (631) 591-4141
 Email: pre@aps.org
 Web: <http://publish.aps.org/>
 Submissions: pretext@aps.org or
<http://authors.aps.org/ESUB/>

Member Subscriptions:

APS Membership Department
 One Physics Ellipse
 College Park, MD 20740-3844
 Phone: (301) 209-3280 Fax: (301) 209-0867
 Email: membership@aps.org

Institutional Subscriptions:

APS Subscription Services
 Suite 1NO1
 2 Huntington Quadrangle
 Melville, NY 11747-4502
 Toll free: (800) 344-6902
 Phone: (516) 576-2270 Fax: (516) 349-9704
 Email: subs@aps.org

Manuscripts should be submitted electronically in acceptable format (see <http://authors.aps.org/ESUB/> or inquire at pretext@aps.org). If this is not possible, send one copy to the Editorial Office. Submission is a representation that the manuscript has not been published previously and is not currently under consideration for publication elsewhere. Authors should provide indexing codes according to the PACS scheme (available at <http://publish.aps.org/PACS/>). An executed APS **copyright-transfer** form must be provided (effective only on acceptance for publication); the form is available via our Web submission server and via <http://authors.aps.org/>. Information for contributors may be found on our Web server or in the January and July issues.

To help defray editorial and production expenses, authors of manuscripts which are not submitted in acceptable electronic format are expected to pay a **publication charge** of \$1325/article, \$825/Rapid Communication or Brief Report, \$300/Comment or Reply. Acceptable formats are REVTeX (preferred), L^AT_EX, plain T_EX; MS Word; PostScript figures (preferred). **Reprints** are offered for sale to authors.

For information about **subscription prices** and about the **online version** of the journal, see our Web server, or inquire at assocpub@aps.org. **Member** inquiries regarding **subscriptions**, renewals, address changes, missing or damaged copies, and single-copy orders should be addressed to the APS Membership Department. **Institutional subscribers** should address subscription inquiries to APS Subscription Services. For address changes please send both old and new addresses, and if possible, send the mailing label from a recent issue.

Copyright © 2012 American Physical Society. All rights reserved.

Physical Review E_{TM} is a trademark of the American Physical Society.

Rights and Permissions: See <http://publish.aps.org/copyrightFAQ.html>.

Copying: No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the written permission of the publisher, except as stated below. Single copies of individual articles may be made for private use or research. Authorization is given to copy articles beyond the use permitted by Sections 107 and 108 of the U.S. Copyright Law, provided the copying fee of \$25.00 per copy per article is paid to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, USA.

Reproduction of an entire Article in a reprint collection, or for advertising or promotional purposes, or republication in any form requires permission from APS. Permission must be sought from the Associate Publisher, American Physical Society, One Physics Ellipse, College Park, MD 20740-3844; email: assocpub@aps.org.

Other Use: Permission is granted to quote from the journal with the customary acknowledgment of the source. Permission must be sought from the APS Associate Publisher to reproduce a figure, table, or excerpt of an Article. Authorization for private use or research does not extend to systematic or multiple reproduction, to copying for promotional purposes, to distribution in any format, or to republication in any form. In all such cases, specific permission from APS must be obtained.

Physical Review E_{TM} [ISSN: 1539-3755 (print), 1550-2376 (online); CODEN PLEEE8; printed in USA] is published monthly by the American Physical Society, 1 Research Road, Ridge, NY 11961-2701.

POSTMASTER: Send address changes to Physical Review E_{TM}, APS Subscription Services, Suite 1NO1, 2 Huntington Quadrangle, Melville, NY 11747-4502. The 2012 print + online base price is \$3185. Periodicals postage rates are paid at Huntington Station, NY, and additional mailing offices.