PHYSICAL REVIEW E

STATISTICAL, NONLINEAR, AND SOFT MATTER PHYSICS Soft Matter and Biological Physics

Editor IRWIN OPPENHEIM

(Massachusetts Institute of Technology)

Associate Editors GERALD HEDSTROM

(Lawrence Livermore National Laboratory)

BRANT M. JOHNSON

(Brookhaven National Laboratory)

RANDALL D. KAMIEN

(University of Pennsylvania)

YURI KIVSHAR

(Australian National University)

MARGARET MALLOY (APS Editorial Office)

ANTONIO POLITI
(Istituto Nazionale di Ottica Applicata)

DANIEL ROTHMAN

(Massachusetts Institute of Technology)

Assistant Editors
MARGARET FOSTER
VALERIE L. MILLER

Senior Assistant to the Editor JOANNA POPADIUK

Senior Editorial Assistant JILL M. GARGANO

APS Editorial Office

1 Research Road, Box 9000 Ridge, NY 11961-9000 Phone: (631) 591-4050 Fax: (631) 591-4141 Email: pre@aps.org Web: http://publish.aps.org/ Submissions: pretex@aps.org or http://publish.aps.org/ESUB/

EDITORIAL BOARD

Term ending 31 December 2001

A. Aharony	Critical Phenomena,
	Percolation
A. Albano	Statistical Physics, Chaos
D. CHANDLER	Chemical Physics
J. R. Dorfman	Statistical Physics
J. Krug	Statistical Physics
P. Manneville	Nonlinear Physics,
	Hydrodynamics
G. Parisi	Statistical Physics
C. Rebbi	Computational Physics
W. B. Russel	Complex Fluids, Fluid
	Dynamics
J. Sommerer	Experimental Chaos
H. Sompolinsky	Disordered Systems, Spin
	Glasses, Neural Networks
R. Temkin	Beam Physics

Term ending 31 December 2002

N. Abraham	Solitons
J. CARY	Plasmas
H. Frauenfelder	Biological Physics
A. Pikovsky	Nonlinear Physics
R. PINDAK	Liquid Crystals
S. J. Schiff	Biological Physics
K. R. Sreenivasan	Nonlinear Dynamics
Fluid Dynamics, Turbulence	
N. G. VAN KAMPEN	Statistical Mechanics

Term ending 31 December 2003

	O .
B. ECKHARDT	Classical Chaos, Quantum
	Chaos
D. Griffiths	Electrodynamics
E. J. HINCH	Fluid Dynamics
A. Liu	Complex Fluids, Polymers
T. Lubensky	Liquid Crystals, Complex
	Fluids
S. Nagel	Glass Transitions, Granular
	Materials
T. Roser	Beam Physics
D. Weitz	Complex Fluids, Biological
	Physics

The American Physical Society

One Physics Ellipse College Park, MD 20740-3844

President
President-Elect
Vice-President
Editor-in-Chief
Treasurer and
Publisher
Executive Officer

GEORGE H. TRILLING
WILLIAM F. BRINKMAN
MYRIAM P. SARACHIK
MARTIN BLUME
THOMAS J. MCILRATH
JUDY R. FRANZ

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

Nonmember Subscriptions:

APS Subscription Services

Suite 1NO1 2 Huntington Quadrangle Melville, NY 11747-4502 Phone: (516) 576-2270, (800) 344-6902

Fax: (516) 349-9704 Email: subs@aps.org

Production and distribution by

American Institute of Physics

Suite 1NO1 2 Huntington Quadrangle Melville, NY 11747-4502 Phone: (516) 576-2200 Fax: (516) 576-2643 Email: pre@aip.org

Manuscripts may be submitted electronically if in appropriate format (see http://publish.aps.org/ESUB/ or inquire at pretex@aps.org). Alternatively, send four copies 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. A signed APS copyright-transfer form (effective only on acceptance for publication) must be provided; the form is available on our Web server and appears at the end of the 11 December 2000 issue of *Physical Review Letters*. 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 published articles are requested to pay a **publication charge** of \$90 per article plus \$90 per journal page. Publication charges are not requested for properly prepared electronic submissions. Acceptable formats are REVTeX (preferred), LaTeX, Harvmac, Plain TeX; PostScript figures. **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, microfilm, and single-copy orders should be addressed to the APS Membership Department. **Nonmembers** should address subscription inquiries to APS Subscription Services. For address changes please send both old and new addresses, and, if possible, include an address stencil imprint from the mailing wrapper of a recent issue; allow six weeks advance notice.

Copyright 2001 by The American Physical Society

Permission to quote excerpts or to reprint any figures or tables should be obtained directly from an author. The American Physical Society for its part hereby grants permission to quote excerpts and reprint figures and/or tables from its journals with acknowledgment of the sources. Individual teachers, students, researchers, and libraries in nonprofit institutions acting for them are permitted to make hard copies of articles for use in teaching or research, provided such copies are not sold. Copying of articles for sale by document delivery services or suppliers, or beyond the free copying allowed above, is permitted against payment of a copying fee. The current copying fee is \$20.00, per article, per copy. Express permission of APS is not required, except for purposes stated below, provided that the fee is paid through the Copyright Clearance Center, Inc. (CCC), 222 Rosewood Drive, Danvers, MA 01923. Contact the CCC for information on how to report copying and remit payments. Reproduction in a reprint collection, or for advertising or promotional purposes, or republication in any form requires permission of one of the authors and a license from APS. Such a license must be sought from Barbara Hicks, Associate Publisher, The American Physical Society, One Physics Ellipse, College Park, MD 20740-3844. Permission from the author must be sought and obtained from him or her directly.

Physical Review E (ISSN: 1063-651X; CODEN PLEEE8; printed in USA) is published monthly (on the 1st of each month) by The American Physical Society through the American Institute of Physics.