

PHYSICAL REVIEW LETTERS[™]

Providing rapid publication of short reports of important fundamental research, with coverage of major advances in all aspects of physics and of developments with significant consequences across subdisciplines.

Editors PIERRE MEYSTRE ROBERT GARISTO SAMINDRANATH MITRA REINHARDT B. SCHUHMAN Associate Editors BRANT M. JOHNSON WANG MU Senior Assistant Editors DONAVAN HALL SAAD E. HEBBOUL YONKO MILLEV JANE THROWE DANIEL UCKO Assistant Editors ABHISHEK AGARWAL ROCIO CORTES SERENA DALENA KEVIN DUSLING SONJA GRONDALSKI VALERIE L. MILLER STOJAN REBIC JOHN RIPKA KATHERINE THOMAS Consulting Editors GEORGE BASBAS STANLEY G. BROWN Adjunct Associate Editors STEPHAN GRILL FRANK NARDUCCI DENIZ VAN HEUNSBERGEN	Editorial Board (Divisional Associate Editors) <i>Astrophysics</i> R. COWSIK, A. KOSOWSKY, J. LATTIMER, E. POISSON, M. VISSER <i>Atomic, Molecular, and Optical Physics</i> S.M. BARNETT, M. CAPONE, C.L. COCKE, M. FLEISCHHAUER, M. INGUSCIO, G. MORIGI, M.B. PLENIO, J.-M. RAIMOND, W. ZHANG <i>Biological Physics</i> H. LEVINE, F. MACKINTOSH <i>Chemical Physics</i> G. PACCHIONI <i>Condensed Matter Physics</i> J.L. BARRAT, G. BASTARD, J. BEAMISH, K. BEHNIA, F.J. BERMEJO, N. BRILLIANTOV, R. CLAESSEN, S. COPPERSMITH, S.A. CROOKER, H.D. DREW, T. EGAMI, R. EGGER, R. FAZIO, D.L. FENG, H.A. FERTIG, Y. GEFFEN, M.B. HASTINGS, M.I. KATSNELSON, T.M. KLAPWIJK, A. KNORR, A.B. KUKLOV, G. MAHLER, R. MERLIN, R. MOESSNER, A. MURAMATSU, P. PRELOVSEK, N.V. PROKOFEV, T. PRUSCHKE, J. RIERA, H.R. SCHOBER, D. SEN, Y.R. SHEN, P. SHENG, G. SHVETS, R.R.P. SINGH, S.B. SINNOTT, C.M. SOUKOULIS, O.V. TCHERNYSHYOV, L.H. TJENG, M. TROYER, B.O. WELLS, X.C. XIE <i>Fluid Dynamics</i> J. DE BRUYN, J. EGGERS, G. FALKOVICH, R.L. LEHENY <i>Laser Science</i> S.T. CUNDIFF, T. ELSAESSER, B.A. MALOMED, A. MAQUET, P.W. MILONNI, C.R. STROUD <i>Materials Physics</i> U. DIEBOLD, R. FEENSTRA, J. NEATON, M. PAYNE, S.K. STREIFFER, H. ZABEL <i>Nuclear Physics</i> C. GALE, J.C. HARDY, N. HERRMANN, J.J. KOLATA, R. LIOTTA, M. RHO <i>Particles and Fields</i> P. DE FORCRAND, A. DONNACHIE, R. GOPAKUMAR, V. LUTH, R.R. VOLKAS, C.E.M. WAGNER <i>Physics of Beams</i> I. BEN ZVI <i>Plasma Physics</i> M.L. GOLDSTEIN, T.C. LUCE, J.-P. MATTE, G. MORALES, P.A. NORREYS <i>Polymer Physics</i> R.G. LARSON, M.W. MATSEN, G. REITER Foundations of Quantum Mechanics R. JOZSA Quantum Information C.M. CAVES, J.-W. PAN, F.K. WILHELM Statistical Physics and Nonlinear Dynamics R.A. BLYTHE, H. CHATÉ, R. KLAGES, Y. MORENO, S. REDNER, P. REIMANN, K. SNEPPEN, P.A. TASS		American Physical Society Officers <i>President</i> MALCOLM R. BEASLEY <i>President-Elect</i> SAMUEL H. ARONSON <i>Vice-President</i> HOMER A. NEAL <i>Past President</i> MICHAEL S. TURNER <i>Editor in Chief</i> GENE D. SPROUSE <i>Executive Officer</i> KATE P. KIRBY One Physics Ellipse College Park, MD 20740-3844 APS Editorial Office Directors <i>Editorial</i> DANIEL T. KULP <i>Journal Information Systems</i> MARK D. DOYLE <i>Journal Operations</i> CHRISTINE M. GIACCONE 1 Research Road Ridge, NY 11961-2701 Phone: (631) 591-4060 Email: prl@aps.org Web: http://journals.aps.org/ Submissions: http://authors.aps.org/Submissions/ 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 P.O. Box 41 Annapolis Junction, MD 20701 Toll free: (888) 339-9655 Phone: (301) 617-7809 Fax: (240) 757-4289 Email: subs@aps.org
---	--	--	---

Letters intended for this journal must be short and self-contained. A description of editorial Policies and Practices can be found on our Web server. Instructions for manuscript preparation are given in the Information for Contributors available on our Web server.

Manuscripts should be submitted electronically in acceptable format (see <http://authors.aps.org/Submissions/>). 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://journals.aps.org/PACS/>). An executed APS **copyright-transfer** form (effective only on acceptance for publication) must be provided.

To help defray editorial and production expenses, authors of published Letters are expected to pay a **publication charge** of \$700 (\$250 for a Comment or Reply). Charges are higher (\$875 for a Letter, \$320 for a Comment or Reply) for those which are not submitted in an acceptable electronic format. Acceptable formats are REV_TEX (preferred), L_TEX, 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 © 2014 American Physical Society. All rights reserved.
Physical Review Letters[™] is a trademark of the American Physical Society.

Rights and Permissions: See <http://journals.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 Letters[™] [ISSN: 0031-9007 (print), 1079-7114 (online); CODEN PRLTAO; printed in USA] is published weekly by the American Physical Society, 1 Research Road, Ridge, NY 11961-2701.

POSTMASTER: Send address changes to *Physical Review Letters[™]*, APS Subscription Services, P.O. Box 41, Annapolis Junction, MD 20701. The 2014 print + online base price is \$3705. Periodicals postage rates are paid at College Park, MD, and additional mailing offices.