PHYSICAL REVIEW D
PARTICLES, FIELDS, GRAVITATION, AND COSMOLOGY

Editors
ERICK J. WEINBERG **D. L. NORDSTROM**

Associate Editors
JONATHAN A. BAGGER **ROBERT D. PISARSKI**

Senior Assistant Editor
URS M. HELLER

Assistant Editors
RAJAMANI NARAYANAN **RASHMI RAY**

EDITORIAL BOARD

Term ending 31 December 2005	*Term ending 31 December 2006*	*Term ending 31 December 2007*
BEVERLY K. BERGER	PETER ARNOLD	JOHN L. FRIEDMAN
JUAN M. MALDACENA	DIETER BRILL	MARK STROVINK
STUART RABY	SCOTT DODELSON	DIETER ZEPPENFELD
STEPHEN R. SHARPE	GEORGE STERMAN	

The American Physical Society
One Physics Ellipse
College Park, MD 20740-3844

President	MARVIN L. COHEN
President-Elect	JOHN BAHCALL
Vice-President	JOHN J. HOPFIELD
Editor-in-Chief	MARTIN BLUME
Treasurer and Publisher	THOMAS J. MCILRATH
Executive Officer	JUDY R. FRANZ

APS Editorial Office
1 Research Road, Box 9000
Ridge, NY 11961-9000
Phone: (631) 591-4040
Fax: (631) 591-4141
Email: prd@aps.org
Web: http://publish.aps.org/
Submissions: prdtex@aps.org or http://authors.aps.org/esubs/

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
Phone: (516) 576-2270, (800) 344-6902
Fax: (516) 349-9704
Email: subs@aps.org

Manuscripts should be **submitted** electronically in acceptable format (see `http://authors.aps.org/esubs/` or inquire at prdtex@aps.org). If this is not possible, send three 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. Authors should provide indexing codes according to the PACS scheme (available at `http://authors.aps.org/PACS/`). An executed APS **copyright-transfer** form must be provided (effective only on acceptance for publication); the form is available on the APS Web server and appears at the end of the 12 November 2004 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 articles which are not submitted in acceptable electronic format are expected to pay a **publication charge** of $115 plus $115 per journal page. Acceptable formats are REVTEX (preferred), LATEX, plain TEX; MS Word; 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. **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 © 2005 by The American Physical Society. All rights reserved.
Physical Review D ™ is a trademark of The American Physical Society.

Rights and Permissions
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 $23.00 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, The 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 D [ISSN: 1550-7998 (print), 1550-2368 (online); CODEN PRVDAQ; printed in USA] is published twice a month by The American Physical Society, 1 Research Road, Box 9000, Ridge, NY 11961-9000.

POSTMASTER: Send address changes to Physical Review D, APS Subscription Services, Suite 1NO1, 2 Huntington Quadrangle, Melville, NY 11747-4502. The 2005 print + online base price is $3490. Periodicals postage rates are paid at Huntington Station, NY, and additional mailing offices.