

Roger G. Newton, Editor
John L. Challfour, Associate Editor
William H. Davis, Assistant Editor

Indiana University, Bloomington, IN 47405

Editorial Board

Stephen L. Adler

Institute for Advanced Study
Princeton, NJ 08540, USA
*Quantum mechanics and quantum
field theory, algorithms for
computational physics*

Bryce DeWitt

Department of Physics
University of Texas,
Austin, TX 78712-1081, USA
*Quantum gravity, quantum
physics and field theory,
mathematical methods*

Cécile DeWitt-Morette

Department of Physics,
University of Texas,
Austin, TX 78712-1081, USA
Functional integration

Louise A. Dolan

Physics Department,
University of North Carolina,
Chapel Hill, NC 27599, USA
*Quantum field theories, string
theory, dynamical systems*

L. D. Faddeev*

Steklov Mathematical Institute,
Fontanka 25,
St. Petersburg, Russia
*Quantum physics, field
theory, scattering theory,
inverse scattering*

Robert Geroch

Department of Physics
University of Chicago
5640 So. Ellis Ave.
Chicago, IL 60637, USA
*General relativity, differential
geometry*

Martin C. Gutzwiller

IBM T. J. Watson Research Center,
P.O. Box 218
Yorktown Heights, NY 10598, USA
*Quantum physics, classical
mechanics, dynamical systems*

Sergio A. Hojman*

Departamento de Física,
Facultad de Ciencias,
Universidad de Chile,
Las Palmeras 4325,
Casilla 653, Santiago, Chile
*Classical mechanics, quantum
theory, gravitation, relativity*

J. L. Lebowitz

Department of Mathematics
Rutgers University
Hill Center-Busch Campus
New Brunswick, NJ 08903, USA
Statistical physics

Elliott Lieb

Jadwin Hall,
Princeton University,
P.O. Box 708,
Princeton, NJ 08544, USA
*Statistical physics,
Schrödinger operators*

Tetsuji Miwa

Research Institute for
Mathematical Sciences,
Kyoto University,
Kitashirakawa, Sakyo-ku,
Kyoto 606, Japan
*Solvable models in field theory
and statistical mechanics,
infinite-dimensional algebras*

N. Mukunda*

Center for Theoretical Studies,
Indian Institute of Science,
Bangalore 560012, India
*Quantum mechanics,
group theory, theoretical optics*

Ezra T. Newman

Department of Physics,
University of Pittsburgh,
Pittsburgh, PA 15213, USA
*Relativity and gravitation,
classical mechanics
and field theory*

P. C. Sabatier

Laboratoire de Physique
Mathématique,
Université des Sciences,
Place Eugene-Bataillon,
34095 Montpellier Cedex, France
*Scattering theory, inverse
problems, wave propagation
(including water waves)*

Ruedi Seiler

Fachbereich Mathematik MA-7-2,
Technische Universität Berlin,
Strasse des 17 Juni 136,
D-1000 Berlin 12, Germany
*Quantum physics,
quantum field theory*

F. Wilczek

Institute for Advanced Study,
Princeton, NJ 08540, USA
*Cosmology, quantum mechanics,
geometrical methods,
quantum field theory*

Kenji Yajima

Department of Mathematics,
College of Arts and Sciences,
University of Tokyo,
3-8-1 Komaba,
Meguro-ku, Tokyo 153, Japan
*Schrödinger operators,
scattering theory*

*Because of communication difficulties, manuscripts should not be sent to these members of the Editorial Board.

AIP Editorial Operations: John T. Scott, *Manager*.

AIP Production: Lin Miller, *Editorial Supervisor*;
Andrea Witt, *Journal Coordinator*; Carolyn DeMarco, *Chief
Production Editor*.

Submit manuscripts (3 copies) to Office of the Editor,
Journal of Mathematical Physics, Indiana University, The
Poplars, Room 324, Bloomington, IN 47405.

Authors who wish to have their manuscript handled by a
specific member of the Editorial Board should so notify the
editorial office at the time of their submission, and also send
two copies (in addition to the three sent to the editorial of-
fice) of their manuscript to the Board member of their
choice.

Proofs and all correspondence concerning papers in

the process of publication should be addressed to: Editorial
Supervisor, *Journal of Mathematical Physics*, American In-
stitute of Physics, 500 Sunnyside Boulevard, Woodbury, NY
11797-2999.

Additional information regarding subscriptions,
reprints, and permissions appears following the table of
contents.

The *Journal of Mathematical Physics* (ISSN: 0022-2488)
is published monthly by the American Institute of Physics.
Second-class postage paid at Woodbury, NY, and at addi-
tional mailing offices. POSTMASTER: Send address
changes to the *Journal of Mathematical Physics*, American
Institute of Physics, 500 Sunnyside Blvd., Woodbury, NY
11797-2999.

The *Journal of Mathematical Physics* is published monthly by the American Institute of Physics (AIP).

Its purpose is the publication of papers in mathematical physics—that is, the application of mathematics to problems in physics and the development of mathematical methods suitable for such

applications and for the formulation of physical theories. The mathematics should be written in a manner that is understandable to theoretical physicists. Occasionally, reviews of mathematical subjects relevant to physics and special issues combining papers on a topic of current interest may be published.

Subscription Prices* (1994)

	U.S.A. & Poss.	Can., Mex., Central & S. Amer. & Caribbean	Foreign Surface Mail	Air Freight Europe, Asia, Africa & Oceania	Optional Air Freight
Members†	\$80	\$100	\$100	—	\$130
Nonmembers	\$1165	\$1185	—	\$1215‡	—

*The Journal is available on microfiche at \$80 per year to members and \$1165 per year at the nonmember rate.

†AIP Member and Affiliated Societies.

‡Nonmember rate subscriptions to Europe, Asia, Africa, and Oceania include air freight service.

Back-Number Prices. 1994 single copies: \$110. Prior to 1994 single copies: \$22 for members and \$110 for nonmembers.

Subscription, renewals, and address changes should be addressed to *AIP Member and Subscriber Services (MASS) Division, 500 Sunnyside Blvd., Woodbury, NY 11797-2999*. Allow at least six weeks advance notice. For address changes please send both old and new addresses and, if possible, include a mailing label from the wrapper of a recent issue.

Claims, Single Copy Replacement and Back Volumes: Missing issue requests will be honored only if received within six months of publication date (nine months for Australia and Asia). Single copies of a journal may be ordered and back volumes are available in print or microform. For price quotations and availability contact AIP Member and Subscriber Services at (516) 576-2270.

Copying fees: Copying of articles beyond that permitted by the Fair Use provisions (Sections 107 and 108) of the U.S. Copyright Law requires payment of fees. The code at the bottom of the first page of each article gives the fee for each copy of the article. Fees should be paid through the *Copyright Clearance Center (CCC), 222 Rosewood Dr., Danvers, MA 01923*.

Reprints: Reprints may be ordered at current rates from AIP Publication Page Charge and Reprints—CFD, 500 Sunnyside Blvd., Woodbury, NY 11797-2999; minimum order of 100 is required.

The Item-fee Code for this publication is: 0022-2488/94 \$6.00.

Permission For Other Use: Permission is granted to quote from the journal with the customary acknowledgment of the source. To reprint a figure, table, or other excerpt requires in addition the consent of one of the original authors and notification to AIP. Reproduction for advertising or promotional purposes, or republication in any form, is permitted only under license from AIP, which will normally require that the permission of one of the authors be obtained. Direct inquiries to: Office of Rights and Permissions, American Institute of Physics, 500 Sunnyside Blvd., Woodbury, NY 11797-2999.

Document Delivery: For information on obtaining copies of individual articles, contact AIP Circulation and Fulfillment Division, 500 Sunnyside Blvd., Woodbury, NY 11797-2999; phone: (516) 676-2277; (800) 344-6908; fax: (516) 394-9704; E-mail: elecprod@pinet.aip.org.

Online Availability: Abstracts of journal articles published by the AIP and its Member Societies are available in bibliographic databases on major online hosts. The abstracts are also available in the SPIN database via the AIP online service, PINET (Physics Information Network). In addition to SPIN, PINET offers other physics information sources, a jobs database, membership directories, and Advance Abstracts, a current awareness service with abstracts of research papers up to three months prior to their publication in AIP or Member Society Journals. Please call 800-874-0947 or 516-576-2262 for further information.