## JOURNAL OF COMPUTATIONAL PHYSICS

## Editor

## Gretar Tryggvason

Worcester Polytechnic Institute, Worcester, Massachusetts

## **Associate Editors**

Rémi Abgrall	Pierre Degond	Parviz Moin	John Strain
Université Bordeaux 1	Centre National de la	Stanford University	University of California
Talence, France	Recherche Scientifique	Stanford, California	Berkeley, California
Michael Baines University of Reading Reading, United Kingdom	Toulouse, France  Alex Friedman  Lawrence Livermore	Stanley J. Osher University of California Los Angeles, California	Eli Turkel Tel Aviv University Tel Aviv, Israel
Alvin Bayliss Northwestern University Evanston, Illinois	National Laboratory Livermore, California	Annick Pouquet National Center for Atmospheric Research Boulder, Colorado	Evgenii V. Vorozhtsov Institute of Theoretical and Applied Mechanics Novosibirsk, Russia
John P. Boyd University of Michigan Ann Arbor, Michigan	Dana A. Knoll Los Alamos National Laboratory Los Alamos, New Mexico	Tamar Schlick  New York University  New York, New York  Berend Smit	Pieter Wesseling Delft University of Technology Delft, The Netherlands
Shiyi Chen The Johns Hopkins University Baltimore, Maryland	Petros Koumoutsakos Swiss Federal Institute of Technology Zürich, Switzerland	Universiteit van Amsterdam, Amsterdam, The Netherlands	Takashi Yabe  Tokyo Institute of  Technology,  Tokyo, Japan
Phillip Colella Lawrence Berkeley National Laboratory Berkeley, California	William R. Martin University of Michigan Ann Arbor, Michigan	Piotr K. Smolarkiewicz National Center for Atmospheric Research Boulder, Colorado	Stéphane Zaleski Université Pierre et Marie Curie Paris, France

Editors Emeriti: Jeremiah U. Brackbill John Killeen Phil L. Roe

Aims and scope of the journal: The mission of the Journal of Computational Physics is to publish material that will assist in the reliable and accurate solution of scientific problems by numerical computation.

Publication information: Journal of Computational Physics (ISSN 0021-9991). For 2005, volumes 202–210 are scheduled for publication. Subscription prices are available upon request from the Publisher or from the Regional Sales Office nearest you or from the journal's website (http://www.elsevier.com/locate/jcp). Further information is available on this journal and other Elsevier products through Elsevier's website: (http://www.elsevier.com). Subscriptions are accepted on a prepaid basis only and are entered on a calendar year basis. Issues are sent by standard mail (surface within Europe, air delivery outside Europe). Priority rates are available upon request. Claims for missing issues should be made within six months of the date of dispatch.

Orders, claims, and journal enquiries: please contact the Customer Service Department at the Regional Sales Office nearest you:

Orlando: Elsevier, Customer Service Department, 6277 Sea Harbor Drive, Orlando, FL 32887-4800, USA; phone: (+1) (877) 8397126 [toll free number for US customers], or (+1) (407) 3454020 [customers outside US]; fax: (+1) (407) 3631354; e-mail: usjcs@elsevier.com

Amsterdam: Elsevier, Customer Service Department, PO Box 211, 1000 AE Amsterdam, The Netherlands; phone: (+31) 20 4853757; fax: (+31) 20 4853432; e-mail: nlinfo-f@elsevier.com

Tokyo: Elsevier, Customer Service Department, 4F Higashi-Azabu, 1-Chome Bldg, 1-9-15 Higashi-Azabu, Minato-ku, Tokyo 106-0044, Japan; phone: (+81) (3) 5561 5037; fax: (+81) (3) 5561 5047; e-mail: jp.info@elsevier.com

Singapore: Elsevier, Customer Service Department, 3 Killiney Road, #08-01 Winsland House I, Singapore 239519; phone: (+65) 6349 0222; fax: (+65) 6733 1510; e-mail: asiainfo@elsevier.com

Advertising information: Advertising orders and enquiries can be sent to: South America: Mr Tino DeCarlo, The Advertising Department, Elsevier Inc., 360 Park Avenue South, New York, NY 10010-1710, USA; phone: (+1) (212) 633 3815; fax: (+1) (212) 633 3820; e-mail: t.decarlo@ elsevier.com. Europe, USA, Canada and ROW: Advertising orders and enquiries can be sent to: e-mail: commercialsales@elsevier.com. Miss Katrina Barton, phone: (+44) (0) 20 7611 4117; fax: (+44) (0) 20 7611 4463.

US mailing notice: Journal of Computational Physics (ISSN 0021-9991) is published semimonthly in January, March, May, July, September, November and monthly in February, April, June, August, October and December by Elsevier Inc. (P.O. Box 211, 1000 AE Amsterdam, The Netherlands). Annual subscription price in the USA US\$ 4672 (valid in North, Central and South America), including air speed delivery. Periodical postage rate paid at Jamaica, NY 11431.

**USA POSTMASTER:** Send address changes to *Journal of Computational Physics*, Publications Expediting, Inc., 200 Meacham Ave, Elmont, NY 11003. **AIRFREIGHT AND MAILING** in the USA by Publications Expediting Inc., 200 Meacham Avenue, Elmont, NY 11003.

English language help service: Upon request, Elsevier will direct authors to an agent who can check and improve the English of their paper (before submission). Please contact authorsupport@elsevier.com for further information.

© The paper used in this publication meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper)