

Communications in Computational Physics

Volume 5, Issues 2-4, February 2009
Papers also published electronically
<http://www.global-sci.com>

Editor-in-Chief:

Xian-Tu He

Institute of Applied Physics and Computational Mathematics (IAPCM), Beijing

Selected Papers from 7th International Conference on Spectral and High Order Methods (ICOSAHOM07)

Chinese Academy of Sciences, Beijing, June 18-22, 2007

Special Issue Editors:

Zhiming Chen, *Chinese Academy of Sciences*

Zhong-Ci Shi, *Chinese Academy of Sciences*

Chi-Wang Shu, *Brown University*

Tao Tang, *Hong Kong Baptist University*



Editor-in-Chief:

Xian-Tu He

Institute of Applied Physics and
Computational Mathematics,
Beijing 100088, China

Managing Editors:

Longjun Shen

Institute of Applied Physics and
Computational Mathematics,
Beijing 100088, China

Tao Tang

Department of Mathematics, Hong
Kong Baptist University, Kowloon
Tong, Hong Kong

Associate Editors:

Joan Adler

Department of Physics, Technion, Haifa
32000, Israel

Gang Bao

Department of Mathematics, Michigan
State University, East Lansing, MI 48824-
1027, USA

John Boyd

Department of Atmospheric, Oceanic and
Space Sciences, University of Michigan,
Ann Arbor, MI 48109, USA

Wei Cai

Department of Mathematics, University
of North Carolina at Charlotte, Charlotte,
NC 28223, USA

Shiyi Chen

Department of Mechanical Engineering,
The Johns Hopkins University, MD
21218, USA

Weng Cho Chew

Department of Electrical and Electronic
Engineering, The University of Hong
Kong, Pokfulam Road, Hong Kong

Weinan E

Program in Applied & Computational
Mathematics, Princeton University,
Princeton, NJ 08544-1000, USA

Xingao Gong

Department of Physics, Fudan University,
Shanghai, China

Jan S. Hesthaven

Division of Applied Mathematics, Brown
University, Providence, RI 02912, USA

Lianjie Huang

Mail Stop D443, Los Alamos National
Laboratory, Los Alamos, NM 87545, USA

Communications in Computational Physics

Song Jiang

Institute of Applied Physics and
Computational Mathematics, Beijing
100088, China

George Karniadakis

Division of Applied Mathematics,
Brown University, Providence RI
02912, USA

Boo-Cheong Khoo

Department of Mechanical &
Production Engineering, National Univ.
of Singapore, Singapore

David P. Landau

Department of Physics and Astronomy,
The University of Georgia, GA 30602-
2451, USA

Bo Li

Department of Mathematics, University
of California, San Diego, CA 92093-
0112, USA

Haiqing Lin

Department of Physics, The Chinese
University of Hong Kong, Shatin, Hong
Kong

Zhihong Lin

Department of Physics and Astronomy,
University of California, Irvine, USA

Stanley Osher

Department of Mathematics, University
of California, Los Angeles, CA 90095-
1555, USA

Jie Shen

Department of Mathematics, Purdue
University, West Lafayette, IN 47907-
2067, USA

Chi-Wang Shu

Division of Applied Mathematics,
Brown University, Providence, RI
02912, USA

Dietrich Stauffer

Department of Theoretical Physics,
University of Cologne, Cologne,
Germany

Sauro Succi

Istituto per le Applicazioni del Calcolo
"Mauro Picone" del C.N.R., Viale del
Policlinico 137, Italy

Eitan Tadmor

Center for Scientific Computation &
Mathematical Modeling, University
of Maryland, MD20742-2389, USA

Lei-han Tang

Department of Physics, Hong Kong
Baptist University, Kowloon Tong,
Hong Kong

Roger Temam

Institute for Scientific Computing &
Applied Mathematics, Indiana
University, Bloomington, USA

Michel A. Van Hove

Department of Physics and Materials
Science, City University of Hong
Kong, Hong Kong

Bin Wang

LASG, Institute of Atmospheric
Physics, Chinese Academy of
Sciences, Beijing 100029, China

Dingsheng Wang

Institute of Physics, Chinese
Academy of Sciences, Beijing
100080, China

Xiaoqun Wang

Department of Physics, Renmin
University of China, Beijing, China

Kun Xu

Department of Mathematics, The
Hong Kong University of Science &
Technology, Kowloon, Hong Kong

Xueqiao Xu

Lawrence Livermore National
Laboratory, L-630, P.O. Box 808,
Livermore, CA 94550, USA

Takashi Yabe

Department of Mechanical
Engineering & Science, Tokyo
Institute of Technology, Japan

Pingwen Zhang

School of Mathematical Sciences,
Peking University, Beijing 100871,
China

Yao Zheng

Center for Engineering & Scientific
Computation, Zhejiang University,
Zhejiang 310027, China