

Preface

Special Issue for ICCP7

The Seventh International Conference on Computational Physics (ICCP7) was held in Beijing on May 17-20, 2010, which attracted over 100 researchers in computational physics from several countries. The 7th conference of this international conference series was organized by the Institute of Applied Physics and Computational Mathematics (IAPCM).

After the conference, over 20 papers have been submitted for publication in this special issue. With rigorous peer-review process and due to the space limitation, only 9 submitted papers are accepted for publication in the special issue:

Remi Abgrall

A review of residual distribution schemes for hyperbolic and parabolic problems: the July 2010 state of the art

A. Anantharaman and C. Le Bris

Elements of mathematical foundations for numerical approaches for weakly random homogenization problems

Juan Cheng and Chi-Wang Shu

Improvement on spherical symmetry in two-dimensional cylindrical coordinates for a class of control volume Lagrangian schemes

Yun-Zhou Sun, Lin Yi and Jian-Sheng Wang

Effects of Dzyaloshinsky-Moriya interaction on planar rotator model on triangular lattice

Haiyang Hu, Peng Bai and Qiang Wang

High efficient numerical simulation of infrared radiation from a hot exhaust nozzle

Bingyun Ao, Piheng Chen, Peng Shi, Xiaolin Wang, Wangyu Hu and Liang Wang

Computer simulation of helium effects in plutonium during the aging process of self-radiation damage

Jiao Zhang, Yanhui Wang and Dezhen Wang

Period multiplication in a continuous time series of radio-frequency DBDs at atmospheric pressure

Su-Ming Weng, Zheng-Ming Sheng, Hui Xu and Jie Zhang
Vlasov-Fokker-Planck simulations for high-power laser-plasma interactions

Zhengru Zhang and Zhonghua Qiao
An adaptive time-stepping strategy for the Cahn-Hilliard equation

We would like to take this opportunity to thank all the referees for their diligent work. We would also like to thank the Scientific Committee members and the local organizing committee members for their support.

Special Issue Editors:
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