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Preface

The International Symposium on Computational & Applied PDEs was held at Zhangjiajie National Park of China from July 1-7, 2001. The main goal of this conference is to bring together computational, applied and pure mathematicians on different aspects of partial differential equations to exchange ideas and to promote collaboration. Indeed, it attracted a number of leading scientists in computational PDEs including Doug Arnold (Minnesota), Jim Bramble (Texas A & M), Achi Brandt (Weizmann), Franco Brezzi (Pavia), Tony Chan (UCLA), Shiyi Chen (John Hopkins), Qun Lin (Chinese Academy of Sciences), Mitch Luskin (Minnesota), Tom Manteuffel (Colorado), Peter Markowich (Vienna), Mary Wheeler (Texas Austin) and Jinchao Xu (Penn State); in applied and theoretical PDEs including Weinan E (Princeton), Shi Jin (Wisconsin), Daqian Li (Fudan) and Gang Tian (MIT). It also drew an international audience of size 100 from Austria, China, Germany, Hong Kong, Iseael, Italy, Singapore and the United States.

The conference was organized by Yunqing Huang of Xiangtan University, Jinchao Xu of Penn State University, and Tony Chan of UCLA through ICAM (Institute for Computational and Applied Mathematics) of Xiangtan university which was founded in January 1997 and directed by Jinchao Xu. The scientific committee of this conference consisted of Randy Bank of UCSD, Tony Chan of UCLA, K. C. Chang and Long-an Ying of Peking University, Qun Lin, Zhong-Ci Shi and Yaxiang Yuan of Chinese Academy of Sciences, Gang Tian of MIT, Mary Wheeler of UT Austin, Jinchao Xu of Penn State, and Yulin Zhou of Institute for Applied Physics and Computational Mathematics, Beijing.

The one-week conference featured 20 invited speakers, each of whom gave 45-minutes lectures, and about 40 other speakers. All invited talks were of high quality, covering several aspects of modern computational and theoretical partial differential equations. The conference site Zhangjiajie is the top one or two national park in China. It is located in Hunan Province. Participants visiting Zhangjiajie the first time were impressed by the beautiful view of the

mountain, lake and canions. More details on the conference can be found in http://www.math.psu.edu/ccma/pde2001.

We would like to thank Professor Shucheng Li, Preseident of Xiangtan University, for his support and also for his participating the openning ceremony. Thanks also go to Professor Jiping Zhang, Dean of School of Mathematical Sciences at Peking University for his kind support to this conference. Moreover, the conference received considerable financial supports. The main grants were provided by the Institute for Computational and Applied Mathematics of Xiangtan University, School of Mathematical Sciences of Peking University, the Center for Computational Mathematics and Applications of Penn State University, the Science and Technology Department of Hunan Province, the National Science Foundation of China, and the State Key Basic Research Project "Large Scale Scientific Computing Research". We are grateful to all sponsors for their generous support.

These conference proceedings were refereed. We would like to thank all referees for their support. The performance of the meeting depended very much on many helpers, including Susan He, Xu Chen, Zhongbo Chen, Jianmei Yuan and Qishen Xiao of Xiangtan University and Rosemary Manning of Penn State University. We appreciate their assistance in making the conference organization a success. Finally, we thank Tammy Lam and Amy Lee of Hong Kong Baptist University for the considerable work they put into producing the final layout of this proceedings.

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