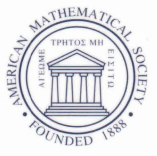
CONTEMPORARY MATHEMATICS

383

Recent Advances in Adaptive Computation

Proceedings of the International Conference
on Recent Advances in Adaptive Computation
May 24–28, 2004
Zhejiang University, Hangzhou, China

Z.-C. Shi
Z. Chen
T. Tang
D. Yu
Editors



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Contents

Preface v

A Synthesis of A Posteriori Error Estimation Techniques for Conforming, Non-Conforming and Discontinuous Galerkin Finite Element Methods
MARK AINSWORTH 1

Averaging Techniques for Reliable and Efficient *A Posteriori* Finite Element Error Control: Analysis and Applications
CARSTEN CARSTENSEN and MAX JENSEN 15

Adaptive Computation with PML for Time-harmonic Scattering Problems
ZHIMING CHEN and XUEZHE LIU 35

Recent Progress on A-posteriori Error Analysis for the p and h-p Finite Element Methods
BENQI GUO 47

Adaptive Mortar Edge Element Methods in Electromagnetic Field Computation
RONALD H. W. HOPPE 63

Adaptive Multi-Meshes in Finite Element Approximation of Optimal Control
W. B. LIU 113

Maximum Norm Error Estimates for the Finite Element Method Allowing Highly Refined Grids
ALFRED H. SCHATZ 133

Moving Mesh Methods for Computational Fluid Dynamics
TAO TANG 141

A Conservative Scheme for 2D and 3D Adaptive Semi-Lagrangian Advection
JÖRN BEHRENS and LARS MENTRUP 175

An Optimal Streamline Diffusion Finite Element Method for a Singularly Perturbed Problem
LONG CHEN and JINCHAO XU 191

A Posteriori Error Estimates of Mixed Methods for Two Phase Flow Problems
YANPING CHEN 203

Reduced-order Modeling of Navier-Stokes Equations via Centroidal Voronoi Tessellation
MAX GUNZBURGER and HYUNG-CHUN LEE 213

A Two-mesh Superconvergence Method for Mesh Adaptivity
BJØRN–OVE HEIMSUND and XUE-CHENG TAI 225

Adaptive Moving Mesh Modeling for Two Dimensional Groundwater Flow and Transport
WEIZHANG HUANG and XIAOYONG ZHAN 239

Adaptive Computation of the Corner Singularity with the Monotone Jump Condition Capturing Scheme
YIN-LIANG HUANG and WEI-CHENG WANG 253

Adaptive Mesh Refinement and its Application to Magneto-Hydrodynamics
SHENGTAI LI 269

An Immersed Finite Element Method for Elasticity Equations with Interfaces
ZHILIN LI and XINGZHOU YANG 285

Derivative Superconvergence of Equilateral Triangular Finite Elements
RUNCHANG LIN and ZHIMIN ZHANG 299

A Splitting Moving Mesh Method for 3-D Quenching and Blow-Up Problems
KEWEI LIANG and PING LIN 311

An Adaptive Algorithm for Ordinary, Stochastic and Partial Differential Equations
KYOUNG-SOOK MOON, ERIK VON SCHWERIN, ANDERS SZEPESSY, and RAÚL TEMPONE 325

Recovery Type A Posteriori Error Estimate for Distributed Convex Optimal Control Problems Governed by Integral-differential Equations
NINGNING YAN 345

A Mortar Element Method for Coupling Natural Boundary Element Method and Finite Element Method for Unbounded Domain Problem
SHENG ZHANG and DEHAO YU 361

Robust and Efficient Adaptive Moving Mesh Solution of the 2-D Euler Equations
P. A. ZEGELING, W. D. DE BOER, and H. Z. TANG 375

Preface

Over the past decade there have been very rapid developments in adaptive computations. To review the recent developments and to explore exciting new directions in this area, the International Conference on Recent Advances in Adaptive Computation was held at the Mathematical Research Center of Zhejiang University in Hangzhou, China, on May 24–28, 2004. The conference covers modern theories and practical applications of the adaptive methods. The scope of the conference is to bring together both specialists and users to discuss the state of the art and the new directions of adaptive computations.

The conference attracted a number of leading scientists in adaptive computations, including the following invited speakers: Mark Ainsworth (University of Strathclyde, Scotland), Carsten Carstensen (Humboldt University at Berlin, Germany), Zhiming Chen (Chinese Academy of Sciences, China), Benqi Guo (University of Manitoba, Canada), Ronald H. W. Hoppe (Universitaet Augsburg, Germany, and University of Houston, USA), Stig Larsson (Chalmers University of Technology, Sweden), Steve W.-B. Liu (University of Kent, England), Rolf Rannacher (University of Heidelberg, Germany), Alfred H. Schatz (Cornell University, USA), and Tao Tang (Hong Kong Baptist University, China). It also drew an international audience of 80 people. Detailed information, including invited speakers, the organizing committee, and conference programs, can be found at `http://lsec.cc.ac.cn/~raac03`.

We are very grateful for the generous financial support provided by the Institute of Computational Mathematics of the Chinese Academy of Sciences as well as the International Research Team on Complex Systems of the Chinese Academy of Sciences and the Large Scale Scientific Computation Research Project of the Ministry of Science and Technology of China.

A number of staff members at Zhejiang University and the Institute of Computational Mathematics, Chinese Academy of Sciences, worked together to handle detailed conference arrangements. We would especially like to thank Professor Xinghua Wang (Chairman of the local organizing committee), Professor Hongwei Xu (Deputy Director of the Mathematical Research Center of Zhejiang University), and Professor Danfu Han (Associate Head of the Department of Mathematics) for their great support. We would also like to thank Professor Xiaoliang Cheng, Ms. Wenqiong Zhang, and Mr. Heyu Wang for their help. We appreciate their assistance in making the conference organization a success.

These conference proceedings were refereed. We would like to thank all referees for their support. We thank Tammy Lam of Hong Kong Baptist University for the considerable work she put into producing the final layout of the proceedings.

Zhong-Ci Shi, Chinese Academy of Sciences
Zhiming Chen, Chinese Academy of Sciences
Tao Tang, Hong Kong Baptist University
Dehao Yu, Chinese Academy of Sciences

There has been rapid development in the area of adaptive computation over the past decade. The International Conference on Recent Advances in Adaptive Computation was held at Zhejiang University (Hangzhou, China) to explore these new directions. The conference brought together specialists to discuss modern theories and practical applications of adaptive methods. This volume contains articles reflecting the invited talks given by leading mathematicians at the conference. It is suitable for graduate students and researchers interested in methods of computation.

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