Workshop on Recent Advances in Numerical Analysis

Organizers

- Jianguo Huang, Shanghai Jiao Tong University
- Jinglai Li, Shanghai Jiao Tong University
- Lei Zhang, Shanghai Jiao Tong University

Introduction

The Workshop on Recent Advances in Numerical Analysis will be held from Nov 15 to Nov 16, in the Department of Mathematics, Shanghai Jiao University, Shanghai, China.

The aim of this workshop is to bring together experts in the field of numerical analysis (in the broad sense) and explore possible collaborations. We expect to cover more traditional topics such as Finite Element methods, domain decomposition, adaptive methods, as well as new developments in multi-scale methods, sparse approximation, uncertainty quantification, and stochastic computation.

Invited Speakers and Talks

- Wenbin Chen (Fudan University) : Numerical simulations for some new epitaxial thin film models.
- Yanping Chen (South China Normal University) : Error estimates and superconvergence of mixed finite element methods for bilinear optimal control problems
- Xiaoliang Cheng (Zhejiang University): On a Kohn-Vogelius type formulation for an optimization problem arising in bioluminescence tomography.
- Eric Chung (The Chinese University of Hong Kong): Adaptive generalized multiscale finite element method.
- Xiaoying Dai (Chinese Academy of Sciences): Adaptive Finite Element approximations for Kohn-Sham models.
- Huoyuan Duan (Wuhan University) : Multiscale stabilized FEM for convection-dominated advection-diffusion-reaction equations.
- Jun Hu (Peking University) : 弹性力学问题混合有限元方法.
- Lijian Jiang (Hunan University) : High dimensional model representation and its application in stochastic model reduction.
- Hongyu Liu (Hong Kong Baptist University) : Locating multiple multiscale electromagnetic scatterers by a single far-field measurement.
- Shipeng Mao (Chinese Academy of Sciences) : Adaptive mixed finite element method for incompressible magnetohydrodynamics.
- Zuoqiang Shi (Tsinghua University) : Graph Laplacian and Laplace-Beltrami operator on point cloud.
- Haijun Wu (Nanjing University) : A Combined Finite element and Multiscale finite element method for the multiscale elliptic problems.

- Xiaoping Xie (Sichuan University) : BPX preconditioner for nonstandard finite element methods for diffusion problems.
- Xuejun Xu (Chinese Academy of Sciences) : A Robin-type Domain Decomposition preconditioner.
- Liwei Xu (Chongqing University) : Variational methods for the fluid-structure interaction problem.
- Xiaoming Yuan (Hong Kong Baptist University) : Some new convergence results of Primal-Dual hybrid gradient algorithm.
- Weiying Zheng (Chinese Academy of Sciences) : On eddy current model of nondestructive evaluation.
- Tao Zhou (Chinese Academy of Sciences) : Analysis for the multivariate discrete least-squares projection: applications to uncertainty quantification.

Abstract

http://math.sjtu.edu.cn/conference/NA2014/abstract.txt

Program

http://math.sjtu.edu.cn/conference/NA2014/Program.pdf

Hotel

Huhua International Hotel, No. 300 Heqing Road, Minghang, Shanghai 200240
沪华国际大酒店，上海市闵行区鹤庆路300号，200240
电话: 021-61268299, 021-51801144
请注意: 我们订的沪华在鹤庆路，请别混淆为剑川路或者沪闵路上的沪华，谢谢。

The easiest way to get there is to take a Taxi, and it will cost about 100 RMB from Hongqiao, and 200 RMB from Pudong, but the time
is about the same since there is more traffic from Hongqiao.

http://www.huhuahotels.com/

Sponsors

- National Science Foundation of China
- Department of Mathematics, Shanghai Jiao Tong University
- Ministry of Education Key Laboratory of Scientific and Engineering Computing, Shanghai Jiao Tong University
- Shanghai Municipal Key Lab in Multiphysics Modeling, Analysis and Simulation, Shanghai Jiao Tong University

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