Program of the conference

In: Jan Brandts and Jan Chleboun and Sergey Korotov and Karel Segeth and Jakub Šístek and Tomáš Vejchodský (eds.): Applications of Mathematics 2012, In honor of the 60th birthday of Michal Křížek, Proceedings. Prague, May 2-5, 2012. Institute of Mathematics AS CR, Prague, 2012. pp. 336–338.

Persistent URL: http://dml.cz/dmlcz/702920

PROGRAM OF THE CONFERENCE

Wednesday, May 2

13.00 – 14.00 Registration

14.00 – 14.30 Opening. Pavel Krejčí, Director of the Institute of Mathematics
Presentation of Bolzano Medal to Michal Křížek
František Katrnoška, violin: Ave Mathematica

14.30 – 15.00 Pekka Neittaanmäki

15.00 – 15.30 Coffee Break

15.30 – 16.00 Jan Brandts
From binary cube triangulations to acute binary simplices

16.00 – 16.30 Shuhua Zhang
Numerical methods for the valuation of American options with regime switching and the calibration of the extended CIR model

16.30 – 17.00 Zhimin Zhang
Superconvergence in spectral collocation methods

18.00 – 22.00 Welcome Party, Blue Hall

Thursday, May 3

9.00 – 9.30 Martin Stynes
A curious property of oscillatory FEM solutions of one-dimensional convection-diffusion problems

9.30 – 10.00 Hans-Görg Roos
Error estimates for finite element methods in balanced norms for singular perturbation problems

10.00 – 10.30 Aihui Zhou
Adaptive finite element analysis based on perturbation arguments

10.30 – 11.00 Coffee Break

11.00 – 11.30 Sergey Korotov
Discrete maximum principles in the finite element analysis

11.30 – 12.00 John Whiteman
Computational methods for problems of viscoelastic solid deformation with application to the diagnosis of coronary heart disease

12.00 – 14.00 Lunch Break

14.00 – 14.20 Vít Dolejší
An adaptive *hp*-discontinuous Galerkin approach for nonlinear convection-diffusion problems

14.20 – 14.40 Torsten Linss
A posteriori error estimates for high-order FEM applied to 1D reaction-diffusion equations

14.40 – 15.00 Antti Hannukainen
Preconditioners for the Helmholtz equation

15.00 – 15.30 Coffee Break

15.30 – 15.50 Pavel Burda
Analytical solution of Stokes flow near corners and applications to numerical solution of Navier-Stokes equations with high precision

15.50 – 16.10 Šárka Nečasová
Weak solution for the motion of a self-propelled deformable structure in a viscous incompressible fluid

16.10 – 16.30 Radka Keslerová
Steady and unsteady 2D numerical solution of generalized Newtonian fluids flow

18.00 – 23.00 Conference Dinner, U Seminaristy Restaurant, Spálená St. 45

Friday, May 4

9.00 – 9.30 Miloslav Feistauer
Analysis and applications of space-time discontinuous Galerkin method

9.30 – 10.00 Beloslav Riečan
Probability on algebraic systems

10.00 – 10.30 Hehu Xie
A type of multigrid method for eigenvalue problems

10.30 – 11.00 Coffee Break

11.00 – 11.30 Lawrence Somer
My twelve years of collaboration with Michal Křížek on number theory

11.30 – 12.00 Tomáš Vejchodský
Computing upper bounds on Friedrichs' constant

12.00 – 14.00 Lunch Break

14.00 – 14.20 Jan Vondrák
New model of precession, valid in time interval of 400 thousand years

14.20 – 14.40 Alena Pravdová
Algebraic classification of the Weyl tensor: various approaches

14.40 – 15.00 Vojtěch Pravda
Algebraic classification of the Weyl tensor: applications

15.00 – 15.20 Ľubomíra Balková
Combinatorics on words and its applications

15.20 – 15.40 Coffee Break

15.40 – 16.00 Hossein Azari
A mesh free numerical method for the solution of an inverse heat problem

16.00 – 16.20 Marta Čertíková
Numerical comparison of different choices of interface weights in the BDDC method

16.20 – 16.40 Jakub Šístek
Parallel adaptive BDDC method

16.40 – 17.10 Alena Šolcová
Bernard Bolzano and other mathematicians in Prague

Saturday, May 5

9.00 – 12.00 A walk through mathematical, physical, and astronomical Prague