PROGRAM OF THE CONFERENCE

Wednesday, November 18

13.00 – 14.00 Registration

14.00 – 15.00 Opening
Jiří Rákosník, Director of the Institute of Mathematics
Presentation of the Medal of the Czech Mathematical Society to Milan Práger and Emil Vitásek
Karel Segeth: Professor Ivo Babuška
Ivo Babuška: Courant element: before and after (video record)
Michal Křížek: Asteroid no. 36060. My wonderful numerical analysis teachers – Milan Práger and Emil Vitásek

15.00 – 15.30 Jan Chleboun
On uncertain data in the modeling of magnetostrictive energy harvesting

15.30 – 16.00 Coffee Break

16.00 – 16.30 John Whiteman
Towards a proof-of-concept for acoustic localisation of coronary artery stenoses

16.30 – 17.00 István Faragó
Qualitative properties in discrete space-time models of epidemic propagation

17.00 – 17.30 Sergey Korotov
Conforming post-refinements of adjacent 3D meshes

Thursday, November 19

9.00 – 9.30 Miloslav Feistauer
Discontinuous Galerkin method for the solution of dynamic elasticity problems and applications to fluid-structure interaction

9.30 – 10.00 Vít Dolejší
hp-adaptive discontinuous Galerkin method for PDEs

10.00 – 10.30 Zhimin Zhang
Some recent development in superconvergence theory

10.30 – 11.00 Coffee Break

11.00 – 11.30 Drahoslava Janovská
Filippov systems with DAE

11.30 – 12.00 Vladimír Janovský
A numerical analysis of a lumped parameter friction model

12.00 – 14.00 Lunch Break

14.00 – 14.20 Kenta Kobayashi
On the interpolation constants over triangular elements

14.20 – 14.40 Monika Balázsová
Stability analysis of the space-time discontinuous Galerkin method in the ALE framework

14.40 – 15.00 Michal Beneš
Multi-time-step domain decomposition methods for parabolic problems

15.00 – 15.20 Larisa Beilina
Iteratively regularized adaptive finite element method in the reconstruction of coefficients in Maxwell's equations

15.20 – 15.40 Coffee Break

15.40 – 16.00 Petr Sváček
On application of extended finite element method for two phase flows with treatment of surface tension and contact angles

16.00 – 16.20 Pavel Kůs
Convergence and stability of higher-order finite element solution of diffusion-reaction equation with Turing instability

16.20 – 16.40 Erdoğan Şen
The regularized trace formula for differential operator equation with unbounded operator coefficient

16.40 – 17.00 Xia Ji
C^0 IPG for transmission eigenvalue problems

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

Friday, November 20

9.00 – 9.30 Zdeněk Strakoš
Preconditioning and the conjugate gradient method in the context of solving PDEs

9.30 – 10.00 Radim Blaheta
Poroelasticity: LBB, locking phenomena, preconditioning

10.00 – 10.30 Hehu Xie
A full multigrid method for eigenvalue problems

10.30 – 11.00 Coffee Break

11.00 – 11.30 Takuya Tsuchiya
Error estimates for Lagrange interpolations on triangles

11.30 – 12.00 Torsten Linss
Maximum-norm a posteriori error estimates for parabolic problems

12.00 – 14.00 Lunch Break

14.00 – 14.20 Jan Zeman
Guaranteed a-posteriori error bounds in homogenization via Fourier-Galerkin methods

14.20 – 14.40 Roberto Castelli
Analytical enclosure of fundamental matrix solution with applications

14.40 – 15.00 Lucie Kárná
How message doubling improve error detection in BSC model

15.00 – 15.20 Irena Sýkorová
Some remarks on function approximation problem

15.20 – 15.40 Coffee Break

15.40 – 16.00 Gianni Pagnini
Wildland fire propagation modelling: A novel approach reconciling models based on moving interface methods and on reaction-diffusion equations

16.00 – 16.20 Yana Di
Numerical simulations on adsorption of the surfactant

16.20 – 16.40 Shuhua Zhang
Modeling and computation of transboundary industrial pollution with emission permits trading by stochastic differential game

16.40 – 17.00 Jaroslav Mlýnek
Optimization of heat radiation intensity and use of evolutionary algorithm

17.00 – 17.20 Jiří Nedoma
Dynamic contact problems in bone neoplasm analyses and the primal-dual active set (PDAS) method

Saturday, November 21

10.00 – 12.00 A walk through the Old Town