

Program of the conference

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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 har-
 vesting
- 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 elas-
 ticity 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 JANOVSÝ
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