

Program of the conference

In: Jan Brandts and Sergej Korotov and Michal Křížek and Karel Segeth and Jakub Šístek and Tomáš Vejchodský (eds.): *Application of Mathematics 2015, In honor of the birthday anniversaries of Ivo Babuška (90), Milan Práger (85), and Emil Vitásek (85), Proceedings*. Prague, November 18-21, 2015. Institute of Mathematics CAS, Prague, 2015. pp. 270–272.

Persistent URL: <http://dml.cz/dmlcz/702985>

Terms of use:

© Institute of Mathematics CAS, 2015

Institute of Mathematics of the Czech Academy of Sciences provides access to digitized documents strictly for personal use. Each copy of any part of this document must contain these *Terms of use*.



This document has been digitized, optimized for electronic delivery and stamped with digital signature within the project *DML-CZ: The Czech Digitized Mathematics Library*
<http://dml.cz>

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