

Scientific program

1st day (Monday, 22 August):

- 9:00 Registration.
- 9:55 Opening.
- 10:00 Key-note lecture:
Prof. Ulrich Langer (Johannes Kepler University Linz, Institute for Computational Mathematics, Austria)
“The Multiharmonic Finite Element Method for the Simulation and Optimal Control of Parabolic Problems”.
- 11:00 Dirk Pauly (Universität Duisburg-Essen, Fakultät für Mathematik, Campus Essen, Germany)
“Functional A Posteriori Error Estimates for Static Maxwell Problems”.
- 11:20 Coffee break.
- 12:00 Tatiana Samrowski (Institut für Mathematik, Universität Zürich, Switzerland)
“Estimates of modeling errors for stationary reaction-diffusion problems”.
- 12:20 Sabrina Gippert (Universität Duisburg-Essen, Fakultät für Mathematik, Germany)
“On a FETI-DP domain decomposition method for linear elasticity problems with compressible and incompressible material components in 3D”.
- 12:40 Svetlana Matsulevich (St.Petersburg State Politechnical University, Russia)
“Reliable method for solving some evolutionary problems”.
- 13:00 Lunch.
- 15:00 Hong Wang (University of Jyväskylä, Finland)
“A fast meshless method for compressible flows”.
- 15:20 Kirill Terehov (Institute of Numerical Mathematics of Russian Academy of Science, Russia)
“Parallel implementation of method of free surface flow simulation on adaptive octree cartesian grid”.
- 15:40 Anna Borich (Moscow Institute of Physics and Technology, Russia)
“A posteriori error estimation of calculation two-dimensional system of shock within the framework of the Euler equations”.
- 16:00 Olga Lebedeva (Institute of Numerical Mathematics of Russian Academy of Science, Russia)
“Eigensolvers based on tensor approximations in TT and QTT formats”.
- 16:20 Coffee break.
- 17:00 Sergey Alyaev (University of Bergen, Norway)
“Multiscale investigation for non-Darcy’s flows”.
- 17:20 Maria Churilova (St.Petersburg State Politechnical University, Russia)
“Mesh adaptations based on functional type a posteriori error estimates with a Raviart-Thomas approximation”.
- 17:40 Alexey Muzalevski (St.Petersburg State Politechnical University, Russia)
“On error estimates for approximate solutions of problems in the theory of thermoelasticity”.
- 18:00 Welcome party.

2nd day (Tuesday, 22 August)

- 10:00 Key-note lecture:
Prof. Rolf Stenberg (Aalto University, Finland)
"Finite element methods for the Brinkman problem".
- 11:00 Olli Mali (University of Jyväskylä, Finland)
"Analysis of errors caused by incomplete knowledge of material data in mathematical models of elastic media".
- 11:20 Coffee break.
- 12:00 Juha Jeronen (University of Jyväskylä, Finland)
"Uncertain data in dynamics of an axially moving panel: a statistical approach".
- 12:20 Tytti Saksa (University of Jyväskylä, Finland)
"Dynamics of axially moving viscoelastic panels".
- 12:40 Marjaana Nokka (University of Jyväskylä, Finland)
"A posteriori estimates for Uzawa type methods in the theory of incompressible fluids".
- 13:00 Lunch.
- 15:00 Mikhail Skopenkov (IITP RAS, KAUST, Russia)
"Convergence of the cotangent scheme for solution of the Dirichlet boundary value problem".
- 15:20 Yuriy Semerich (Department of Applied and Higher Mathematics of the Penza State University, Russia)
"The R-functions method for mathematical modeling of field propagation in the coaxial gyrotron".
- 15:40 Walk through city center, Peter and Paul fortress.
- 18:30 Bout trip.

3rd day (Wednesday, 23 August)

- 10:00 Key-note lecture:
Prof. Alex Klawonn (Universität Duisburg-Essen, Fakultät für Mathematik, Germany)
"Deflation and Projector Preconditioning in iterative substructuring methods: Connections and new results".
- 11:00 Immanuel Anjam (University of Jyväskylä, Finland)
"Estimates of uncertainty errors for a magnetostatics problem".
- 11:20 Tatiana Dobroserdova (Lomonosow Moscow State University, Russia)
"Modelling of the atherosclerosis influence on hemodynamics".
- 11:40 Santtu Salmi (University of Jyväskylä, Finland)
"PDEs motivated by financial applications".
- 12:00 Coffee break.
- 12:40 Round table discussion.
- 13:40 Closing.
- 14:00 Trip to Peterhof (Summer residence of the Russian Royal Family).