

RMMM-2003

Tentative variant: September 21, 2003

List of presented talks.

C. Carstensen: *Adaptive finite elements for relaxed methods (FERM) in computational microstructures.*

M. Feistauer: *Discontinuous Galerkin finite element method: a reliable tool for mathematical modelling.*

J. Rappaz: *Analysis and numerical simulation of motions of a glacier.*

S. Repin: *Functional type a posteriori error estimates for problems in the theory of viscous fluids.*

S. Rjasanow: *Adaptive cross approximation and its applications.*

C. Carstensen, S. Sauter: *A posteriori error analysis for elliptic PDEs on domains with complicated structures.*

E. Stein, M. Rüter: *Adaptive modeling and finite element approximations in structural mechanics.*

T. Strouboulis: *Robustness of error estimators for an important class of engineering problems.*

J. Brandts: *A novel approach to the algebraic eigenvalue problem.*

C. Eck: *A two-scale method for phase transitions with dendritic microstructure.*

S. Grosman: *Robust local problem error estimation for a singularly perturbed reaction-diffusion problem on anisotropic finite element meshes.*

M. Frolov, P. Neittaanmäki, S. Repin: *On theoretical and numerical justification of the efficiency of mesh adaptation based on the duality error majorants.*

K. Kolman: *A two-level method for nonsymmetric eigenvalue problems.*

P. Korotov, P. Neittaanmäki, S. Repin: *A posteriori error estimation of “quantities of interest” for the elliptic-type boundary value problems.*

D. Kuzmin: *High-resolution finite element schemes based on a fully multidimensional flux limiter of TVD type.*

S. Korotov, J. Martikainen: *Comparative study of a posteriori error estimation in terms of linear functionals for the elliptic-type boundary value problems.*

C. Pester: *A posteriori error estimation on spherical domains.*

M. Rech, S. Repin, S. Sauter, A. Smolianski: *A posteriori error control and adaptive approximation for the Dirichlet problem on complicated domains.*

M. Rüter, E. Stein: *Error-controlled adaptive finite element methods in elastic fracture mechanics.*

S. Repin, S. Sauter, A. Smolianski: *A posteriori estimation of the dimension reduction errors.*

P. Sváček: *Numerical solution of fluid flow over a moving profile.*

T. Vejchodský: *Survey of a posteriori error strategies for linear elliptic and parabolic problems.*