Czech-Japanese Seminar in Applied Mathematics

Room No. 235

Wednesday August 4		Thursday August 5		Friday August 6	
9:00-9:05	Opening				
9:05-9:40	**M. Tabata** The mass-conservative upwind finite element approximation and its application to the density-dependent Navier-Stokes equations	9:00-9:35	**F. Maršík** Irreversible thermodynamics - Application to fluids and solids	9:00-9:35	**N. Saito** L^1 - conservative finite-element scheme to a parabolic-elliptic system modelling chemotaxis
9:40-10:15	**P. Knobloch** On Korn's inequality for non-conforming finite elements	9:35-10:10	**K. Tomoeda** Support splitting, connecting, and re-splitting phenomena in the flow through an absorbing medium	9:35-10:10	**D. Ševčovič** Evolution of curves on a surface driven by the geodesic curvature and external force
coffee break		coffee break		coffee break	
10:55-11:30	**J. Fürst** Numerical solution of inviscid and viscous flows using modern schemes and quadrilateral or triangular mesh	10:50-11:25	**T. Nakaki** Numerical computations to moving boundaries in multi-dimensional porous medium equations	10:50-11:25	**K. Nakane** A structure of self-excitation movement of a one-dimensional free boundary problem of hyperbolic type
11:30-12:05	**D. Tagami** Numerical computations of glass melting process	11:25-12:00	**J. Mikyška** Modelling multiphase flow in heterogeneous porous media	11:25-12:00	**R. Holub** Interfacial phenomena in fluid dynamics: Linking atomistic and macroscopic properties
lunch		lunch		lunch	
14:05-14:40	**Y. Uetsuji** Multi-scale finite element analysis of piezoelectric ceramics based on a crystallographic homogenization method	14:00-14:35	**R. Ikota** Propagation speeds of disturbances are bounded for a class of reaction-diffusion systems	14:00-14:35	**Y. Hiraoka** Conley index and numerical verification
14:40-15:05	**J. Makovička** Two-dimensional model of combustion in a furnace	14:35-15:10	**R. Liska** Fully two-dimensional HLLEC Riemann solver and associated difference schemes	14:35-15:00	**R. Honzátko** Flow over a given profile in a channel with dynamical effects
15:05-15:30	**V. Minárik** Numerical simulation of dislocation dynamics	15:10-15:40	**poster session**	15:00-15:25	**M. Kuchařík** Arbitrary Lagrangian Eulerian code for plasma simulations
coffee break		coffee break		coffee break	
16:10-16:45	**D. Ueyama** Pulse dynamics in spatially inhomogeneous medium	16:00-16:35	**A. Suzuki** Parallel finite element computation of the Stokes equations in a spherical shell domain	16:10-16:45	**Y. Kashima** A variational approach to very singular gradient flow equations
16.45-17:10	**P. Bauer** Mathematical modelling and numerical simulation of pollution transport in the boundary layer of atmosphere	16.35-17:00	**V. Chalupecký** Numerical Studies of Cahn-Hilliard Equation and Applications in Image Processing	16.45-17:20	**M. Kimura** Variational Mathematical Model to Quasi-Stationary Phase Transition with the Gibbs-Thomson Effect
Welcome party		Seminar dinner		Announcements	