Friday 17. 12.

Blue lecture hall, Mathematical Institute of Academy of Science, Žitná 25

9:00	Opening
9:15	**Antonín Novotný** Some topics in the mathematical theory of the Navier-Stokes-Fourier system
10:00	**Reinhard Farwig** Flow around rotating obstacles: Basic questions and surprising results
10:45	Coffee
11:15	**Dorin Bucur** About the rugosity effect
12:00	Lunch
14:00	**Giulio Schimperna** On some doubly nonlinear generalizations of the Cahn-Hilliard equation
14:45	**Jan Stebel** Domain dependence of incompressible fluids subject to Navier's slip
15:30	Coffee
16:00	**Václav Kučera** The discontinuous Galerkin method: Theory and applications
16:45	**Helmut Abels** Diffuse interface model for compressible and incompressible two-phase flows of viscous fluids
17:30	Coffee
17:45	Short Presentations **Jan Březina** **Ondřej Kreml** **Martin Lanzendörfer**

Saturday 18. 12.

Lecture hall K1, Faculty of Mathematics and Physics, Sokolovská 83

9:00	**Mark Steinhauer** Static and quasistatic Norton-Hoff Approximations: Regularity properties in 2D
9:45	**Maurizio Grasselli** Attractors of evolution equations of incompressible isothermal binary fluid mixtures
10:30	Coffee
11:00	**Jens Frehse** Regularity properties of elastic-pefect plastic deformations
11:45	**Jaroslav Hron** Monolithic FEM techniques for nonlinear flow with temperature, concentration, pressure and shear-dependent viscosity
12:30	Lunch
14:45	**Elisabetta Rocca** A non-isothermal model for nematic liquid crystals
15:30	Coffee
16:00	**Peter Takáč** (Non-)existence of phase transition solutions for a quasilinear elliptic problem (via optimal regularity and Pohozhaev's identity)
16:45	**Miroslav Bulíček** On unsteady flows of implicitly constituted incompressible fluids
17:30	Coffee
17:45	Short Presentations **Karel Tůma** **Petra Pustějovská** **Jaroslav Havrda** **Tomasz Piasecki**
20:00	Dinner

Sunday 19. 12.

Lecture hall K1, Faculty of Mathematics and Physics, Sokolovská 83

9:00	**Piotr Gwiazda** On scalar hyperbolic conservation laws with a discontinuous flux
9:45	**Piotr Mucha** The existence of traveling waves for Boussinesq system in 3D channel
10:30	Coffee
11:00	**Karol Mikula** Nonlinear PDEs, their numerical solution and applications in biomedical image processing
11:45	**Vít Průša** Jump conditions in stress relaxation and creep experiments of Burgers type fluids-A study in the application of Colombeau algebra of generalized functions
12:30	Lunch
14:00	**Jiří Mikyška** Implementation of higher-order methods for robust and efficient compositional simulation
14:45	**Martin Heida** On compressible Korteweg fluid-like materials
15:30	Coffee
16:00	**Adrian Muntean** Modeling with measures pedestrians' crowd behavior in heterogeneous
16:45	**CLOSING**