Monday 27. 1. 2014

12:00-14:20	REGISTRATION, LUNCH	
14:20-14:30	**Opening**	

Chairman: *Z. Strakoš*

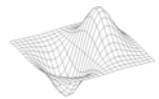|		
14:30-14:50	**J. Haslinger**	*Discretization and numerical realization of contact problems for elasto-perfectly plastic bodies. Part I: Discretization and limit analysis*
14:50-15:10	**S. Sysala**	*Discretization and numerical realization of contact problems for elasto-perfectly plastic bodies. Part II: Numerical methods and control of loading process*
15:10-15:30	**M. Čermák**	*Discretization and numerical realization of contact problems for elasto-perfectly plastic bodies. Part III: Implementation and numerical experiments*
15:30-15:50	**V. Janovský**	*On parameter dependent static contact problems*

15:50-16:20	COFFEE BREAK	

Chairman: *J. Starý*

16:20-16:40	**P. Lukáš**	*Optimization of parameters in SDFEM method for different spaces of parameter τ*
16:40-17:00	**J. Egermaier**	*Isogeometric Analysis for Navier-Stokes Equations*
17:00-17:20	**J. Stebel**	*Discontinuous Galerkin method for advection-diffusion equation in domains with fractures*
17:20-17:40	**A. Kolcun**	*Slightly generalized regular space decompositions*
17:40-18:00	**J. Březina**	*Elliptic equations on non-matching meshes of different dimension*

18:30-19:30	DINNER	
19:30-21:00	WELCOME PARTY	

Tuesday 28. 1. 2014

08:00-09:00   BREAKFAST

Chairman: *I. Marek*

09:00-10:30	**Z. Strakoš**	*Operator preconditioning in numerical solution of partial differential equations*

10:30-11:00   COFFEE BREAK

11:00-12:30	**J. Zeman**	*FFT-based Galerkin method for homogenization of periodic media*

12:30-14:30   LUNCH

Chairman: *M. Rozložník*

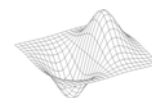| 14:30-14:50	**P. Tichý**	*Max-min and min-max approximation problems for normal matrices revisited*
14:50-15:10	**I. Hnětynková**	*Noise revealing in Golub-Kahan bidiagonalization as a mean of regularization in discrete inverse problems*
15:10-15:30	**T. Gergelits**	*Tracking the trajectory in finite precision CG computations*
15:30-15:50	**J. Papež**	*A posteriori algebraic error estimation in numerical solution of linear diffusion PDEs*
15:50-16:10	**A. Živčák**	*Solution of algebraic systems arising from the discontinuous Galerkin discretization of PDEs by the p-multigrid technique*

16:10-16:40   COFFEE BREAK

Chairman: *J. Malík*

16:40-17:00	**J. Starý**	*High performance computing in micromechanics*
17:00-17:20	**J. Kruis**	*Simultaneous transport of heat, moisture and salt in porous materials*
17:20-17:40	**P. Exner**	*Partition of unity methods for approximation of point sources in porous media*

18:30-19:30   DINNER

Wednesday 29. 1. 2014

08:00-09:00 BREAKFAST

Chairman: *M. Tůma*

| 09:00-10:30 | *J. Zeman* | *FFT-based Galerkin method for homogenization of periodic media* |

10:30-11:00 COFFEE BREAK

| 11:00-12:30 | *Z. Strakoš* | *Operator preconditioning in numerical solution of partial differential equations* |

12:30-14:00 LUNCH

14:00-17:00 EXCURSION

18:30-19:00 DINNER

19:00-20:00 POSTERS

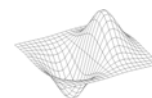| | *T. Brzobohatý* | *CFD simulations by open source software* |
	J. Hozman	*Asymptotic expansion for convection--diffusion problems*
	L. Lukšan	*Efficient tridiagonal preconditioner for the matrix-free truncated Newton method*
	A. Markopoulos, et al.	*FLLOP and MatSol - efficient way to solve large problems of mechanics*
	C. Matonoha, Š. Papáček	*On three equivalent methods for parameter estimation problem based on spatio-temporal FRAP data*
	M. Plešinger	*The Core Problem within a linear approximation problem with multiple right-hand sides*
	V. Rybář	*Variability of Turing patterns in reaction-diffusion systems*

Thursday 30. 1. 2014

08:00-09:00   BREAKFAST

Chairman: *V. Janovský*

| 09:00-10:30 | **V. Kučera** | *Discontinuous Galerkin method* |

10:30-11:00   COFFEE BREAK

| 11:00-12:30 | **M. Šorel** | *Mathematics in image processing* |

12:30-14:30   LUNCH

Chairman: *P. Tichý*

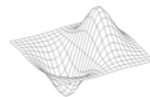| 14:30-14:50 | **J. Malík** | *Stability of suspension bridges in lateral wind* |
14:50-15:10	**P. Salač**	*Numerical results of plunger cavity optimal design*
15:10-15:30	**M. Hokr**	*Příklady zpracování geometricky složitých modelů pro výpočty proudění podzemní vody*
15:30-15:50	**V. Žabka**	*GPU implementation of the finite element method*
15:50-16:10	**V. Hapla**	*Recent Advances in FLLOP Solver*

16:10-16:40   COFFEE BREAK

Chairman: *J. Haslinger*

16:40-17:20	**D. Janovská**	*Different types of noncommutative algebras*
17:20-17:40	**P. Beremlijski**	*Tvarová optimalizace pro 2D kontaktní problém s Coulombovým třením s koeficientem tření závislým na řešení*
17:40-18:00	**D. Horák**	*The efficient reconstruction formula for the amplitudes of the rigid body modes in FETI for contact problems*
18:00-18:20	**M. Isoz**	*LIF data evaluation – image processing algorithms*

19:00-22:00   CONFRENCE DINNER

Friday 31. 1. 2014

08:00-09:00   BREAKFAST

Chairman: *R. Blaheta*

09:00-10:30   **M. Šorel**   *Mathematics in image processing*

10:30-11:00   COFFEE BREAK

11:00-12:30   **V. Kučera**   *Discontinuous Galerkin method*

12:30-12:40   **Final remarks**

12:40-14:00   LUNCH