

ESSAM SCHOOL ON MATHEMATICAL MODELLING, NUMERICAL ANALYSIS AND SCIENTIFIC COMPUTING, KÁCOV, CZECH REPUBLIC, MAY 27 – JUNE 1, 2018

Monday 28. 5. 2018

08:00 BREAKFAST

08:45-09:15 **Opening (J. Málek, M. Rozložník, Z. Strakoš)**

09:15-10:25 **Roland Becker** Finite element methods for boundary and interface conditions – I

10:25-10:40 COFFEE & TEA

10:40-11:50 **Eduard Feireisl** Mathematics of fluids in motion – I

12:00-15:00 LUNCH & BREAK

15:00-15:30 COFFEE & TEA

15:30-16:40 **Eduard Feireisl** Mathematics of fluids in motion – II

16:50-18:00 **Roland Becker** Finite element methods for boundary and interface conditions – II

18:10-18:20 **Tong Tang** *A remark on the global existence of weak solutions to the compressible quantum Navier-Stokes equations*

18:25-18:35 **Karel Tůma** *Viscoelastic rate-type fluid models: a consistent decrease of the number of global unknowns to that of Navier-Stokes*

18:40 DINNER

Tuesday 29. 5. 2018

08:00 BREAKFAST

09:00-10:10 **Roland Becker** Finite element methods for boundary and interface conditions – III

10:10-10:40 COFFEE & TEA

10:40-11:50 **Eduard Feireisl** Mathematics of fluids in motion – III

12:00-15:00 LUNCH & BREAK

15:00-15:30 COFFEE & TEA

15:30-16:40 **Francoise Tisseur** The nonlinear eigenvalue problem – I

16:50-18:00 **Nick Higham** Multiprecision algorithms – I

18:10-18:30 **SIAM Student Chapter + Award**

18:40 DINNER

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Wednesday 30. 5. 2018

08:00	BREAKFAST	
09:00-10:10	<i>Francoise Tisseur</i>	The nonlinear eigenvalue problem – II
10:15-10:25	<i>Václav Kučera</i>	On the time growth of the error of the discontinuous Galerkin method
10:30-10:40	<i>Ivana Šain Glibic</i>	On improved implicit restarting of Arnoldi methods for quadratic eigenvalue problem
10:45-10:55	<i>Jan Blechta</i>	On a commutator preconditioner for the Navier-Stokes equations
11:00-12:00	LUNCH	
12:00-	Trip to Zruč nad Sázavou	
18:40-	DINNER	

Thursday 31. 5. 2018

08:00	BREAKFAST	
09:00-10:10	<i>Nick Higham</i>	Multiprecision algorithms – II
10:10-10:40	COFFEE & TEA	
10:40-11:50	<i>Francoise Tisseur</i>	The nonlinear eigenvalue problem – III
12:00-15:00	LUNCH & BREAK	
15:00-15:30	COFFEE & TEA	
15:30-16:40	<i>Nick Higham</i>	Multiprecision algorithms – III
16:50-17:00	<i>Bangwei She</i>	Convergence of a finite difference MAC scheme for the compressible Navier-Stokes equations
17:05-17:15	<i>Tomáš Los</i>	On three-dimensional flows of internal pore pressure activated Bingham fluids
17:20-17:30	<i>Tadas Telksnys</i>	Generalized operator scheme for the construction of analytical solutions to nonlinear differential equations
17:35-17:45	<i>Ivana Pultarová</i>	Extreme eigenvalues of matrices of non-standard inner products of Hermite polynomials
17:50-18:00	<i>Martin Ladecký</i>	Preconditioning of spectral methods in homogenization
18:05-18:15	<i>Najib Guessous</i>	The higher order nodal method for partial differential equations
18:40	CONFERENCE DINNER	

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Friday 1. 6. 2018

08:00	BREAKFAST	
09:00-09:10	Diego Ruiz-Antolín	A nonuniform FFT based on low rank approximations
09:15-09:25	Stefano Pozza	Algebraic solution of the finite Stieltjes moment problem
09:30-10:00	COFFEE & TEA	
10:00-11:40	Discussion: perspectives, difficulties, open problems	
11:40-11:50	Closing (J. Málek, M. Rozložník, Z. Strakoš)	
12:00-13:00	LUNCH	
13:00	Bus departure	