



Prague SIAM Student Chapter Workshop

Technical programme, March 21

start at **9:30**, lecture hall **S4**

(Malostranské náměstí 25)

- 9:30 *Opening*
- 9:45 **Marie Kubínová** - Noise Revealing in Golub-Kahan Bidiagonalization and Regularization in Discrete Inverse Problems
- 10:10 **Mattia Tani** (Univ. of Bologna) - CG Methods in Non-standard Inner Product for Saddle-point Algebraic Linear Systems with Indefinite Preconditioning
- 10:35 *Coffee break*
- 11:00 **Björn Baran** (Otto von Guericke Univ. Magdeburg) - On the Numerical Solution of Large-scale Linear Matrix Equations Using Python
- 11:25 **Pawan Goyal** (Otto von Guericke Univ. Magdeburg) - MOR of Quadratic-Bilinear Differential Algebraic Equations
- 11:50 **Samuel Relton** (Univ. of Manchester) - Fréchet Derivatives of Matrix Functions and their Applications
- 12:15 *Lunch*
- 14:00 **Robert Kircheis** (Heidelberg Univ.) - Microbial Enhanced Oil Recovery and Efficient Parameter Estimation
- 14:25 **Pavel Hron** (Heidelberg Univ.) - Reactive Transport Modeling in Unsaturated Porous Media
- 14:50 *Coffee break*
- 15:15 **Helena Švihlová** - Imaging, Modeling and Computations of Hemodynamics in Cerebral Aneurysms
- 15:40 **Martin Řehoř** - Mathematical Modeling of Float Glass Forming Process
- 16:05 **Barbora Benešová** (RWTH Aachen Univ.) - An Implicit Midpoint Spectral Approximation of Nonlinear Cahn-Hilliard Equations
- 16:30 *Closing remarks*