

Schedule

Tuesday, 08 November 2016

17.00 – 19.00 *Registration at Grillhof*
19.00 *Dinner*

Wednesday, 09 November 2016

08.30 – 08.35 *Opening*
08.35 – 09.20 MARI PAZ CALVO
Word series: some applications in numerical integration
09.20 – 09.45 DAVID COHEN
Exponential integrators for nonlinear Schrödinger equations with white noise dispersion
09.45 – 10.10 CHIARA PIAZZOLA
Solution of large-scale Lyapunov differential equations
10.10 – 10.35 *Coffee break*
10.35 – 11.00 CHRISTIAN STOHRER
Finite element heterogeneous multiscale method for time-dependent Maxwell's equations
11.00 – 11.25 HERMANN MENA
Splitting methods for stochastic partial differential equations
11.25 – 11.50 MARTINA MOCCALDI
Adapted numerical integration of advection-reaction-diffusion problems generating periodic wavefronts
11.50 – 12:15 ANDREAS STURM
Locally implicit time integration for linear Maxwell's equations
12.15 – 14.00 *Lunch break*
14.00 – 14.25 MARKUS GASTEIGER
ADI preconditioners for the solution of the steady-state Vlasov equation
14.25 – 14.50 TOBIAS JAHNKE
Limit dynamics of the dispersion-managed nonlinear Schrödinger equation
14.50 – 15.15 MARCEL MIKL
Adiabatic midpoint rule for the dispersion-managed nonlinear Schrödinger equation
15.15 – 15:40 ROBERT ALTMANN
Splitting methods for constrained diffusion-reaction systems
15.40 – 16.10 *Coffee break*
16.10 – 16.35 SIMONE BUCHHOLZ
Mind the gap - two approaches to highly oscillatory differential equations
16.35 – 17.00 RAFFAELE D'AMBROSIO
Stability issues for stochastic multistep methods

- 17.00 – 17.25 LUBEN VULKOV
Numerical solution of degenerate ultraparabolic equations for pricing of Asian options
- 17.25 – 17.50 JONAS KÖHLER
ADI splitting and the discontinuous Galerkin method
- 17.50 – 18.15 GREGOR STAGGL
An extension of the Savage–Hutter equations for the modeling of gravity driven mass flows over arbitrary topography in one space dimension
- 18.30 *Dinner*
- 20.00 *Evening programme*

Thursday, 10 November 2016

- 08.30 – 09.15 MARTIN J. GANDER
Space-time parallel methods based on domain decomposition
- 09.15 – 09.40 LUKAS EINKEMMER
A comparison of boundary corrections for Strang splitting
- 09.40 – 10.05 MICHAELA MEHLIN
Multi-level local time-stepping methods of Runge–Kutta type for wave equations
- 10.05 – 10.30 JOHANNES EILINGHOFF
Fractional error estimates of splitting schemes for the nonlinear Schrödinger equation
- 10.30 – 10.55 *Coffee break*
- 10.55 – 11.20 PATRICK KRÄMER
Numerical methods for an efficient integration of the Maxwell–Dirac system
- 11.20 – 11.45 ANTTI KOSKELA
Krylov approximation of polynomially perturbed linear ODEs
- 11.45 – 12.10 NAOMI AUER
Magnus integrators on graphic processing units
- 12.10 – 12.35 ROBIN FLOHR
A splitting approach for freezing waves
- 12.35 – 12.50 MIGLENA N. KOLEVA
Two-grid method for solving non-linear models in mathematical finance
- 12.50 – 14.00 *Lunch break*
- 14.00 – 18.30 *Excursion to Rattenberg and Kristallglas Kisslinger*
<http://www.kisslinger-kristall.com/>
- 18.30 *Conference Dinner, Bierstindl, Innsbruck*

Friday, 11 November 2016

- 08.30 – 08.55 DAVID HIPPE
Numerical analysis of wave equations with dynamic boundary conditions
- 08.55 – 09.20 MARTINA PRUGGER
A Riemann solver free numerical method for two-dimensional conservation laws
- 09.20 – 09.45 OTHMAR KOCH
Error analysis of splitting methods for parabolic problems under Dirichlet boundary conditions
- 09.45 – 10.10 FRANCESCA SCARABEL
Numerical bifurcation analysis of nonlinear delay equations through pseudospectral discretization
- 10.10 – 10.35 *Coffee break*
- 10.35 – 11.00 DAVIDE LIESSI
Approximating the stability of linear periodic delay models by pseudospectral methods
- 11.00 – 11.25 STEFANO MASET
Conditioning and relative error propagation in linear autonomous ordinary differential equations
- 11.25 – 11.50 KOONDANIBHA MITRA
A linear domain decomposition method for unsaturated flow in porous media
- 11.50 – 12.15 PETER KANDOLF
The action of trigonometric and hyperbolic matrix functions
- 12.15 – 12.40 WINFRIED AUZINGER
Similarity to contraction: the companion matrix case
- 12.40 – 12.45 *Closing*
- 12.50 *Lunch*