

Schedule 1: Young Researchers Meeting, 24-25.3.2014

Time	Monday, 24.03.14	Tuesday, 25.03.14
9.00 - 9.30	Arrival	
9.30 - 10.00		T. Schmidt Approximation of spectra and pseudospectra of operators on a Hilbert space
10.00 - 10.30		A. Jeschke A non-hydrostatic correction of the shallow water equations for tsunami modelling
10.30 - 11.15		Coffee break
11.15 - 11.45		D. Gil Kinetic-Induced Moment Systems
11.45 - 12.15		F. Ludovici Error Estimates for a Finite Element Discretization of Parabolic Optimization Problems with Constraints on the Gradient of the State
12.15 - 13.00	Lunch	Lunch
13.00 - 13.30		
13.30 - 14.00	Introduction	J. Holländer Mathematical design of magnetization dynamics
14.00 - 14.30	J. Nahrstaedt Variational data assimilation with a POD/DEIM reduced model of the shallow water equations	L. Shahmuradyan Numerical Techniques for Coalescence Integrals in Population Balance Equations
14.30 - 15.00	I. Breuer Improvements on PHOENIX - The stellar and planetary atmosphere modeling code -	Coffee break
15.00 - 15.30	Coffee break	Social event: Walking tour
15.30 - 16.00	C. Roschat Weak Solutions of Marine Ecosystem Model Equations	
16.00 - 16.30	J. Piwonski Parameter Estimation for Marine Ecosystem Models in 3-D	
16.30 - 17.00	J. Reimer Optimal Experimental Design in Marine Science	
17.00 - 17.30	C. Kratzenstein The One-Shot Optimization Strategy: Simultaneous Model Spin-up and Parameter Optimization	
17.30 - 19.00	Dinner	Dinner
after 19.00	Evening program	Welcome reception

Schedule 2: CSE Workshop, 26.-28.3.2014

Time	Wednesday, 26.03.14	Thursday, 27.03.14	Friday, 28.03.14
09.00 - 09.30		Lecture: Arnold Reusken Finite element techniques for the simulation of two-phase incompressible flows	Lecture: Peter Deuffhard The Smile of the Mathematicians. Mathematical Modelling and Simulation in Facial Surgery
09.30 - 10.00			
10.00 - 10.30	Lecture: Lubomir Banas Modelling and numerics for dynamical micromagnetism	A. Bankole Semi-implicit Smoothed Particle Hydrodynamics Scheme for the Shallow Water Equations	Revathi Appali Modelling and Simulation of Electrically Stimulating Implants and Their Interaction with the Human Body
10.30 - 11.00		M. Braack A directional-do-nothing condition for the Navier-Stokes equations	C. Goetz A new solver for the generalized Riemann problem based on the Rankine-Hugoniot conditions
11.00 - 11.15	Coffee break	Coffee break	Coffee break
11.15 - 11.45	M. Anndif Reduced Order Model for Non-linear Structural Mechanics	A. Srivastav Efficient Discrete Algorithms for Big Data Problems - The Semi-Streaming Model	S. Börm Efficient \mathcal{H}^2 -matrix preconditioners for FEM and BEM problems
11.45 - 12.15	O. Rendel Numerical solution of singular Lur'e equations	A. Gerdes An efficient line search technique and its application to adjoint topology optimization	M. Hinze Error control for Space-time finite element approximations of parabolic optimal control problems
12.15 - 13.00	Lunch	Lunch	Lunch
13.00 - 13.30			Departure
13.30 - 14.00	T. Slawig Surrogate-based Methods for Parameter Identification in Climate Models	M. Rybicki Modelling, Simulation and optimisation of gas flow in an exhaust pipe	
14.00 - 14.30	U. Matthes Model Order Reduction for PDEs with GNAT	P. Gangl Design Optimization of Electric Machines Using Shape Optimization and Sensitivity-Based Topology Optimization	
14.30 - 15.00	A. Alla HJB-POD feedback control for Navier-Stokes equations	T. Jordan An optimal shape design problem for plates	
15.00 - 15.30	C. Kahle A stable discretization for the simulation of two-phase flow using the diffuse interface approach	A. Iske On the Construction of Kernel-Based Adaptive Particle Methods in Numerical Flow Simulation	
15.30 - 16.00	Coffee break	Coffee break	
16.00 - 16.30	S. Vater Adaptive triangular discontinuous Galerkin schemes for tsunami propagation and inundation	V. Savelyev Kinetic Algorithms for Fluid and Magneto Hydro Dynamics	
16.30 - 17.00	S. Beckers The dual weighted residual method applied to the shallow water equations	N. D'Ascenzo Novel Kinetic Algorithm for Magneto Hydro Dynamics	
17.00 - 17.30	W. Bauer A new covariant form of the equations of geophysical fluid dynamics and their structure-preserving discretization	W. Wollner L2-Error of the State for Optimization Problems with Pointwise State Constraints	
17.30 - 19.00	Dinner	Social event: City Tour Plön	
after 19.00	Poster-Session	Conference-Dinner	