Kompaktseminar Numerik in Lambrecht (September 7-9, 2015)

Programme

Monday, September 7							
<= 10:00	Arrival						
10:15	Welcome						
10:20-12:05	**Session 1**	10:20-11:05 Maria Lukacova *How to bridge large scale differences?*	11:05-11:40 Nikita Tretyakov *A rather short introduction into Lattice Boltzmann method*	11:40-12:05 Paul Strasser *Modeling of polymers in a solvent as a mixture of viscoelastic and Newtonian fluids*		Raasch	Chair
12:05-13:30	Lunch						
13:30-15:30	**Session 2**	13:30-14:05 Nehzat Emamy *A macro-scale flow solver for 3D heterogeneous multi-scale simulations using discontinuous Galerkin FEM*	14:05-14:30 Isabell Kraemer *An algorithm for the heterogeneous multiscale method*	14:30-14:55 Sergej Schelle *Hybrid simulation of molecular dynamics and computational fluid dynamics*	14:55-15:30 Hana Mizerova *Numerical simulation of some viscoelastic fluids*	Yelash	Chair
15:30-16:00	Coffee break						
16:00-17:30	**Session 3**	16:00-16:25 Ulrich Heil *Automated motion detection in dental cone-beam CT*	16:25-16:50 Carsten Zöller *Numerical algorithms for the Euclidean projection onto convex polyhedra*	16:50-17:15 Martin Dönges *Efficient numerical realization of singular value shrinkage*	17:15-17:40 Anna Fast *Numerical methods for the rotationally symmetric Willmore problem*	Hanke-Bourgeois	Chair
18:00	Dinner						

Tuesday, September 8							
08:00-08:50	Breakfast						
08:50-10:00	**Session 4**	08:50-09:35 Martin Hanke-Bourgeois *The Henderson theorem*	09:35-10:10 Fabrice Delbary *Numerical methods for the Henderson problem*			Hollborn	Chair
10:10-10:40	Coffee break						
10:40-12:20	**Session 5**	10:40-11:05 David Rosenberger *Comparison of 3 different methods for solving the inverse problem of finding coarse-grained potentials*	11:05-11:30 Christina Degen *Cloud modelling as a differential-algebraic system*	11:30-11:55 Nikolas Porz *Online identification in the cloud model*	11:55-12:20 Bettina Wiebe *A numerical introduction to multiscale contractivity driven cancer invasion models*	Schneider	Chair
12:20-14:00	Lunch						
14:00-18:00	**Excursion**: Hiking trip (options: Weinbiet or Wolfsburg Castle)						
18:00	Dinner						

Wednesday, September 9							
08:00-08:50	Breakfast						
08:50-10:00	**Session 6**	08:50-09:35 Thorsten Raasch *Model reduction techniques*	09:35-10:00 Alexej Disterhoft *First Steps towards a Reduced Basis Method for Self-Consistent Field Theory Models*			Delbary	Chair
10:00-10:30	Coffee break						
10:30-12:10	**Session 7**	10:30-10:55 Esther Hans *Efficient minimization of l1-penalized strictly convex objective functions*	10:55-11:20 Benni Müller *A flexibly-preconditioned QMR solver for large indefinite linear systems*	11:20-11:45 Kolja Becker *Reverse-engineering transcriptional regulation of EMT*	11:45-12:10 Niklas Kolbe *A mathematical model of the EMT in cancer invasion*	Lukacova	Chair
12:10-14:00	Lunch						
14:00-15:35	**Session 8**	14:00-14:25 Thomas Kemmer *Nonlocal electrostatics of biomolecules*	14.25-15:00 Patrik Marschalik *Asymptotical characterization of stiffness of ordinary differential equations*	15:00-15:35 Manuel Baumgartner *Direct simulation of interaction of water droplets and ice particles*		Sfakianakis	Chair
>= 15:35	Departure						