Program, Workshop in Hünfeld, May 7-9, 2004 "Computer Simulation and Theory of Macromolecules 2004"

Friday, May 7th, 2004	
12:00 – 13:30	Arrival, registration and lunch
13:30 – 14:00	Edda Kloppmann (University of Bayreuth) The role of electrostatics in the opsin shift
14:00 – 14:30	Durba Sengupta (Heidelberg University) Understanding the energetics of helical peptide orientations in the membrane
14:30 – 15:00	Tihamer Geyer (Saarland University) Large scale brownian dynamics simulations of proteins in cell compartments: achievements and open questions
15:00 – 15:30	Alexander Spaar (Saarland University) Trajectory analysis of protein-protein encounter studied by brownian dynamics simulations
15:30 – 16:00	Coffee break
16:00 – 16:30	Francesco Rao (University of Zürich) The conformation space network model for folding
16:30 – 17:00	Wei Gu (Saarland University) Solvation free energies and transfer free energies for amino acids from hydrophobic solution to water solution from a very simple residue model
17:00 – 17:30	Volker Knecht (University of Groningen) Interpreting experiments on Langmuir lipid monolayers by molecular dynamics simulations
17:30 – 18:00	Iris Antes (Max Planck Institut für Informatik, Saarbrücken) Target specific scoring functions: Parameter optimization using ensemble Methods
18:00 – 19:00	Dinner
19:00 – 19:30	Wolfgang Wenzel (Forschungszentrum Karlsruhe) Reproducible folding of a three-helix protein in an all-atom forcefield
19:30 –	Poster Session / Beer

Saturday, May 8th, 2004	
8:00 - 9:00	Breakfast
9:00 - 9:30	Eduard Schreiner (Ruhr-University Bochum) Temperature dependent conformational transitions and hydrogen bond dynamics of the elastin-like octapeptide GVG(VPGVG): a molecular dynamics study
9:30 – 10:00	Emil Mittag (University of Hamburg) Thermodynamic properties of proteins in the Wang-Landau framework
10:00 – 10:30	Lars Meinhold (Heidelberg University) Protein collective motions, X-ray diffuse scattering
10:30 – 11:00	Coffee
11:00 – 11:30	Vandana Kurkal (Heidelberg University) Towards understanding the origin of the Boson peak in proteins
11:30 – 12:00	Philippe Hünenberger (ETH Zürich) Stabilization of biomolecules by the disaccharide trehalose
12:00 – 13:00	Lunch
13:00 – 13:30	Rainer Böckmann (University of Zürich) Differential peptide dynamics is linked to MHC polymorphism
13:30 – 14:00	Wolfgang Fischer (University of Oxford) Modelling viral membrane proteins: Vpu from HIV-1
14:00 – 14:30	Ulrich Kleinekathöfer (Technical University of Chemnitz) <i>Molecular dynamics simulations of isolated</i> β -subunits of F_1 -ATPase
14:30 – 15:00	Phuong Nguyen (Johann Wolfgang Goethe University Frankfurt) Structure of a bicyclic peptide in explicit solution: a replica-exchange molecular dynamics simulations study
15:00 – 15:30	Coffee
15:30 – 16:00	Martin Stumpe (MPI for biophysical Chemistry, Göttingen) Structural characterization of urea/water solutions
16:00 – 16:30	Frauke Meyer (Shanghai Institute of Materia Medica) Tension-induced titin kinase activation studied by force-probe molecular dynamics simulation
16:30 – 17:00	Marco Klähn (Ruhr-University Bochum) Intrinsic GTPase Process of Ras p21: MD simulation with QM-MM Force Field
17:00 – 17:30	Jörg Grunenberg (Technical University Braunschweig) Compliance constants from density functional theory for hydrogen bonds in biomolecules
17:30	Departure