JOHANNES GUTENBERG UNIVERSITÄT MAINZ

Center for Computational Sciences

Program workshop Ebernburg 2012

Thursday October 18th

09:50 Welcome

10:00 (Report & proposal) T. Hankeln: *Food Diagnosis by Next-Generation DNA Sequencing*

10:30 (Report) D. Rosenkranz : *Comparative Sequencing of Primate piRNA Transcriptomes*

11:00 V. Tiwari: *Introduction to IMB & Epigenomics of Cellular Differentiation*

11:40 S. Legewie: *Thermodynamic Modeling of Transcriptional Regulation*

12:00 Lunch

13:15 Election of the Executive Committee

13:30 (Report) E. Althaus / A. Hildebrandt: *Computer aided Prognosis of Chronic Liver Diseases*

14:00 (Report) B. Schmidt / T. Hankeln: *Design, Implementation and Evaluation of a Highly Sensitive CUDA-based High-Throughput Short Read Mapping Method*

14:30 (Report) E. Jaenicke / H. Decker / A. Hildebrandt: *Homology Modelling of Large Protein Complexes taking into account Electron Density Maps*

15:00 Coffee break

15:30 (Report & proposal) M. Lukacova / N. Hellmann: *Numerical Study of Chemotaxis and Chemokinesis*

16:00 (Report) U. Kolb / T. Raasch / E. Schoemer: *Efficient Recovery Algorithms in Electron Crystallography*

16:30 Coffee Break

17:00 (Report) N. Hellmann / A. Klenke: *Role of Receptor Clustering for the Efficient Oligomer Formation of Pore Forming Toxins*

18:00 Dinner

Friday October 19th

9:00 (Proposal) G. Diezemann: *Reversible Hydrogen-Bond Network Dynamics under External Forces: Molecular Dynamics Simulations of Catenane Structure*

9:20 (Proposal) F. Schmid / A. Hildebrandt / S. Auer: *Development of a Coarse-Grain Model for Simulations of Interactions between Membranes and Fibril-forming Proteins*

9:40 (Proposal) W. Stöcker / A. Hildebrandt: *Computer assisted Docking and Mutagenesis Studies on Astacin Proteases and their Natural Inhibitors as a Basis for Drug Design*

10:00 Coffee Break

10:20 (Proposal) B. Schmidt / T. Hankeln / V. Tiwari: *Bioinformatics Tools to Discover the Biological Function of Repeats in Eukaryotic Genomes*

10:40 (Proposal) C. Passchier / B. Kaus: *Modelling Branching Fault Zones in the Earth's Crust*

11:00 (Proposal) M. Peternell / E. Schoemer / R. Schulze: *3D Rock-Microstructure Modelling by the use of an Automated Fabric Analyser*

11:20 Coffee Break

11:40 (Proposal) E. Schmidt: *Upgrade NGS Illumina HiSeq*

12:00 (Report) N. Blümer: *Numerically exact Quantum Monte Carlo Algorithms for Impurity Problems*

12:30 Lunch

13:30 Meeting of the Executive Committee