

Jülich Supercomputing Centre

Guest Student Colloquium

26.09.2011 – 27.09.2011, Jülich Supercomputing Centre (16.4), Rotunda (301)

Monday, 26.09.2011

09.25 Introduction & Welcome

09.30 **Momchil Ivanov (University of Leipzig)**

How fast are local Metropolis updates for the Ising model on a graphics card

Janine George (RWTH Aachen)

*Quantum Chemical Calculations of the
Ground State Potential Energy Surface of Ozone*

Sasha Alperovich (Tel Aviv University)

Evaluation of preconditioners for large sparse matrices

11.30 Lunch 🍴🍷

13.00 **Sandra Ahnen (KIT Karlsruhe)**

Dynamic load balancing in a super scalar electromagnetic particle-in-cell code

Hans Peschke (Technical University Dresden)

Hierarchical Tree Construction in PEPC – Optimization of global data exchange

14.20 Coffee ☕

14.40 **Christian Heinrich (Cologne University)**

*Performance measurement and analysis of parallel programs
using the Scalasca toolset*

Sebastian Banert (Chemnitz University of Technology)

A Parallel NFFT Solver for the ScaFaCoS Library

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Tuesday, 27.09.2011

- 09.30 **Francesco Piccolo (University of Napoli)**
GPU based visualization of Adaptive Mesh Refinement (AMR) data
- Kaustubh Bhat (GRS Aachen)**
Volume visualization using the tetrahedron method
- Petar Sirkovic (University of Zagreb)**
Volume reconstruction of brains from one-to-one registration of slices
- 11.30 Lunch 🍴
- 13.00 **Andreas Lücke (University of Paderborn)**
Viscous flow through fractal contacts
- Fabio Pozzati (University of Bologna)**
*Porting and optimization of a Lattice Boltzmann code to Blue Gene/Q
– Comparison with an existing high performance x86 implementation*
- 14.20 Coffee ☕
- 14.40 **Michael Hennecke (IBM Germany)**
Technical Careers at IBM
- Mathias Winkel (Jülich Supercomputing Centre)**
Concluding Remarks
- 18.00 Dinner 🍷