

JSC Guest Student Colloquium

30. 9. & 1. 10. 2013 — building 16.4, Rotunda



Monday, 30. 9. 2013

9.30 Welcome & Session I

Dominik Gräser, Wuppertal

Domain decomposition for simulating the route choice of pedestrians

Qian Zhang, Aachen

Self-consistent atomic orbital computation and visualization

Erik Järleberg, Stockholm

Communication-avoiding strategies for massively parallel N-body simulations

11.35 Lunch ☺

13.00 Session II

Nicola Cadenelli, Brescia

Enable basic MPI-3 support for the Score-P performance measurement system

Patrick Steinbrecher, Bielefeld

How to deal with very small matrices in spacetime

14.20 Coffee Break ☺

14.40 Session III

Benjamin Schott, Leipzig

Physical annealing in the microcanonical ensemble

Maciej Golik, Kraków

Standalone client for the UFTP data transfer tool

Jannis Ehrlich, Bremen

Completely and highly efficient parallel implementation of the Lowe-Andersen thermostat

Tuesday, 1. 10. 2013

9.30 Opening Remarks & Session IV

Martin Perdacher, Wien

Benchmarking performance and scalability of the package PRIMME for sequences of dense correlated eigenproblems

Hadeer El Habashy, Cairo

MD simulations to study the irregular stiffness behavior of poly(N-isopropylacrylamide)

Henrik Larsson, Kiel

Molecular orbital generation sequences

11.35 Lunch ☺

13.00 Session V

Markus Werner, Bonn

Performance and energy efficiency characterization of an embedded GPU platform

Alexander Aschikhin, Hamburg

Hybridization and tuning of a PIC code on JUQUEEN

14.20 Coffee Break ☺

14.40 Keynote Talk

Costas Bekas & Alessandro Curioni

*IBM Zurich Research Laboratory
The road to Exascale: How algorithmic re-engineering can help break the power and performance brick walls*

16.00 Concluding Remarks