9th Workshop on Parallel Systems and Algorithms PASA 2008

Dresden, February 26th, 2008

organized by GI/ITG-Fachgruppen
'Parallel-Algorithmen, -Rechnerstrukturen und -Systemsoftware (PARS)' and
'Parallele und verteilte Algorithmen (PARVA)'

PROGRAM

8:30 – **Registration**

9:15 – 9:30 **Opening (R. Hoffmann and W. Nagel)**

1. Session: GRID and Parallel Computing (K.-D. Reinartz)

9:30 – 10:00 **Specifying and Processing Co-Reservations in the Grid**
Thomas Röblitz (Zuse Institute Berlin)

10:00 – 10:30 **Grid Virtualization Engine: Providing Virtual Resources for Grid Infrastructure**
Emeric Kwemou, Lizhe Wang, Jie Tao, Marcel Kunze, David Kramer, Wolfgang Karl (Universität Karlsruhe, Forschungszentrum Karlsruhe)

10:30 – 11:00 **High Performance Multigrid on Current Large Scale Parallel Computers**
Tobias Gradl, Ulrich Rüde (Universität Erlangen-Nürnberg)

11:00 – 11:30 **Coffee Break**

2. Session: Parallel Computing Systems (J. Keller)

11:30 – 12:00 **SDVM^R: A Scalable Firmware for FPGA-based Multi-Core Systems-on-Chip**
Andreas Hofmann, Klaus Waldschmidt (Universität Frankfurt)

12:00 – 12:30 **Adaptive Cache Infrastructure: Supporting Dynamic Program Changes following Dynamic Program Behavior**
Fabian Nowak, Rainer Buchty, Wolfgang Karl (Universität Karlsruhe)

12:30 – 13:00 **A Generic Tool Supporting Cache Designs and Optimisation on Shared Memory Systems**
Martin Schindewolf, Jie Tao, Wolfgang Karl, Marcelo Cintra
(Universität Karlsruhe, University of Edinburgh – United Kingdom)

13:00 – 14:00 **Lunch**

14:00 – 15:00 **Invited Talk:**
Towards PetaFlops Computing with IBM Blue Gene
Norbert Attig, Friedel Hossfeld (Research Center Juelich)

3. Session: Computation in Parallel (W. Karl)

15:00 – 15:30 **Parallel Derivative Computation using ADOL-C**
Andreas Kowarz, Andrea Walther (Technische Universität Dresden)

15:30 – 16:00 **Coffee Break**

16:00 – 16:30 **How Efficient are Creatures with Time-shuffled Behaviors?**
Patrick Ediger, Rolf Hoffmann, Mathias Halbach
(Technische Universität Darmstadt)

4. Session: Applications for the Cell Broadband Engine (W. Nagel)

16:30 – 17:00 **Hybrid Parallel Sort on the Cell Processor**
Jörg Keller, Christoph Kessler, Kalle König, Wolfgang Heenes
(FernUniversität in Hagen, Linköpings Universitet - Sweden,
Technische Universität Darmstadt)

17:00 – 17:30 **An Optimized ZGEMM Implementation for the Cell BE**
Timo Schneider, Torsten Hoefler, Simon Wunderlich, Torsten Mehlan Wolfgang Rehm
(Technische Universität Chemnitz, Indiana University - USA)

20:00 **Dinner and Award**