

## Program PASA 2014

### Tuesday, Feb 25, 2014

- 11:00 **Tutorial: Energy challenges in processors**, *J. Keller*
- 12:30 Lunch break
- 13:30 **Session 1: Applications I** (Session Chair: *W. Karl*)  
Hybrid parallelization of a seeded region growing segmentation of brain images for a GPU cluster, *A. M. Westhoff*  
Performance Engineering for a Medical Imaging Application on the Intel Xeon Phi Accelerator, *J. Hofmann, J. Treibig, G. Hager, G. Wellein*  
PBA2CUDA - A Framework for Parallelizing Population Based Algorithms Using CUDA, *I. Zgeras, J. Brehm, M. Knoppik*
- 15:00 Coffee break
- 15:30 **Invited Talk** (Session Chair: *J. Keller*)  
The Dome Project: Exascale Technologies for the Square Kilometre Array, *Gero Dittmann (IBM Research)*
- 16:15 **Session 2: Parallel Architecture Evaluation** (Session Chair: *J. Keller*)  
A Quantitative Comparison of PRAM based Emulated Shared Memory Architectures to Current Multicore CPUs and GPUs, *E. Hansson, E. Alnervik, C. Kessler, M. Forsell*  
Evaluation of Adaptive Memory Management Techniques on the Tiler TILE-Gx Platform, *T. Fleig, O. Mattes, W. Karl*
- 17:15 Short break
- 17:20 Meeting of PARS members and steering committee
- 18:00 Program Committee Meeting (Prize)
- 19:30 Dinner at Restaurant Ratskeller incl. Prize award ceremony

### Wednesday Feb 26, 2014

- 09:00 **Session 3: Applications II** (Session Chair: *A. Döring*)  
ScaFES: An Open-Source Framework for Explicit Solvers Combining High-Scalability with User-Friendliness, *M. Flehmig, K. Feldhoff, U. Markwardt*  
A Performance Study of Parallel Cauchy Reed/Solomon Coding, *P. Sobe, P. Schumann*  
A comparison of CUDA and OpenACC: Accelerating the Tsunami Simulation EasyWave, *S. Christgau, J. Spazier, B. Schnor, M. Hammitzsch, A. Babeyko, J. Wächter*
- 10:30 Coffee break
- 11:00 **Session 4: Reconfigurable Computing** (Session Chair: *P. Sobe*)  
An Architecture Framework for Porting Applications to FPGAs, *F. Nowak, M. Bromberger, W. Karl*  
  
Experimental Generation of Configurable Circuits for Rotationally Symmetric Functions, *A. Döring*  
  
Evaluating the Energy Efficiency of Reconfigurable Computing Toward Heterogeneous Multi-Core Computing, *F. Nowak*
- 12:30 **Closing Remarks**, *J. Keller*