

## **Workshop on High-Level Parallel Programming Models and Supportive Environments – HIPS**

### **Workshop Theme**

The 19th HIPS workshop, to be held as a full-day meeting on May 19, 2014 at the IPDPS 2014 conference in Phoenix, focuses on high-level programming of multiprocessors, compute clusters, and massively parallel machines. Like previous workshops in the series, which was established in 1996, this event serves as a forum for research in the areas of parallel applications, language design, compilers, runtime systems, and programming tools. It provides a timely and lightweight forum for scientists and engineers to present the latest ideas and findings in these rapidly changing fields. In our call for papers, we especially encouraged innovative approaches in the areas of emerging programming models for large-scale parallel systems and many-core architectures.

### **Topics of Interest**

Topics of interest to the HIPS workshop include but are not limited to:

- New programming languages and constructs for exploiting parallelism and locality
- Experience with and improvements for existing parallel languages and run-time environments such as MPI, OpenMP, Cilk, UPC, Co-array Fortran, X10, and Chapel
- Parallel compilers, programming tools, and environments
- (Scalable) tools for performance analysis, modeling, monitoring, and debugging
- OS and architectural support for parallel programming and debugging
- Software and system support for extreme scalability including fault tolerance
- Programming environments for heterogeneous multicore systems and accelerators such as GPUs, FPGAs, Cells, and MICs

### **Workshop Chair**

•John Cavazos, University of Delaware - Newark, DE

### **Steering Committee**

- Rudolf Eigenmann, Purdue University - West Lafayette, IN
- Michael Gerndt, Technische Universität München, Germany
- Frank Mueller, North Carolina State University - Raleigh, NC
- Craig Rasmussen, University of Oregon - Eugene, OR
- Martin Schulz, Lawrence Livermore National Laboratory - Livermore, CA

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- Hakan Grahm, Blekinge Institute of Technology, Sweden
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- Jaejin Lee, Seoul National University - Seoul, Korea
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- Tim Mattson, Intel Corp. - DuPont, WA
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- Matthias S. Mueller, RWTH Aachen University - Aachen, Germany
- Stephen Olivier, University of North Carolina - Chapel Hill, NC
- Antoni Pop, University of Manchester - Manchester, United Kingdom
- Philip Roth, Oak Ridge National Laboratory - Oak Ridge, TN
- Michael Spear, Lehigh University - Bethlehem, PA
- Nathan Tallent, Pacific Northwest National Laboratory - Richland, WA
- Zheng (Eddy) Zhang, Rutgers University - New Brunswick, NJ