

Preliminary Call for Papers

8th International Workshop on High-Level Parallel Programming Models and Supportive Environments (HIPS 2003)

held in conjunction with IPDPS 2003, Nice, France

Please see <http://www.bode.in.tum.de/events/hips2003/> for updated information.

Scope:

HIPS 2003 is a full-day workshop to be held at IPDPS 2003 focusing on high-level programming of parallel and grid architectures. Its goal is to bring together researchers working in the areas of applications, computational models, language design, compilers, system architecture, and programming tools to discuss new developments in programming such systems.

One of the keys for a (commercial) breakthrough of parallel processing and grid computing are high-level programming models that allow to produce truly efficient application. Only they allow a wide range of users in a broad spectrum of application domains to fully exploit the capabilities and resources of these architectures. However, current implementations of high-level programming models often suffer from low performance, from the lack of corresponding high-level development tools, e.g. for performance analysis, and from restricted applicability. This situation requires strong research efforts in the design of parallel programming models and languages that are both at a high conceptual level and implemented efficiently, in the development of supportive tools, and in the integration of languages and tools into convenient programming environments.

Submission and Proceedings:

Submissions for HIPS 2003 should not exceed 8 pages. There will be a completely electronic submission process via the Web. An appropriate upload form will be available by September 2002 and submissions for HIPS are due by November 2002. It is planned to publish all accepted papers within the official IPDPS workshop proceedings.

Committees:

Workshop Chairs:

Michael Gerndt Technische Universität München
Martin Schulz Technische Universität München

Steering Committee:

Rudolf Eigenmann Purdue University
Michael Gerndt Technische Universität München
Frank Müller Humboldt Universität Berlin
Martin Schulz Technische Universität München

Topics of interest include, but are not restricted to:

- Concepts and languages for parallel and Grid programming
 - Concurrent object-oriented programming
 - Component-based programming
 - Mobile agents
 - Web services
 - Hybrid programming, e.g. OpenMP/MPI, components/MPI
 - Extensions to traditional programming models, e.g. MPI and OpenMP
- Supportive techniques for environments and testbeds
 - Architectural and communication support
 - Grid system support
 - Runtime systems
 - Integration into local environments
 - Compiler techniques
- Tools for high-level parallel programming
 - System monitoring and debugging
 - Performance contracting, analysis, and optimization
 - Automatic performance analysis support .

Papers should describe the interaction of high-level programming models with compilers, run time systems, and hardware support.

Tentative schedule:

Submission opens: September 2002
Submissions due: November 2002
Workshop: April 2003

This event is sponsored by:

- IEEE Computer Society
- IEEE Technical Committee on Parallel Processing

