

Instructions for HLPP 2017

Special issue on High Level Parallel Programming and Applications will publish high quality papers presented at [HLPP conference](#) to be held in Valladolid, Spain 11-12 July 2017.

Overview

As processor and system manufacturers increase the amount of both inter- and intra-chip parallelism it becomes crucial to provide the software industry with high-level, clean and efficient tools for parallel programming. Parallel and distributed programming methodologies are currently dominated by low-level techniques such as send/receive message passing, or equivalently unstructured shared memory mechanisms. Higher-level, structured approaches offer many possible advantages and have a key role to play in the scalable exploitation of ubiquitous parallelism. The focus of this special issue is on state-of-the-art concepts, tools, and applications for high-level parallel programming, with emphasis on software quality, programming productivity, and high-level performance models.

Topics

The topics of interest for this special issue include, but are not limited to:

- High-level programming, performance models (BSP, CGM, LogP, MPM, etc.) and tools.
- Declarative parallel programming methodologies based on functional, logical, data-flow, and other paradigms.
- Algorithmic skeletons, patterns, etc. and constructive methods.
- High-level parallelism in programming languages and libraries (e.g, Haskell, Scala, etc.): semantics and implementation.
- Verification of declarative parallel and distributed programs.
- Efficient code generation, auto-tuning and optimization for parallel programming.
- Model-driven software engineering for parallel systems.
- Domain-specific languages: design, implementation and applications.
- High-level programming models for heterogeneous/hierarchical platforms with accelerators, e.g., GPU, Xeon Phi, etc.
- High-level parallel methods for large structured and semi-structured datasets.
- Applications of parallel systems using high-level languages and tools.
- Teaching experience with high-level tools and methods

Guest Editors

Guest editors of this special issue are:

- Prof. J. Daniel Garcia. University Carlos III of Madrid.
- Prof. Arturo Gonzalez-Escribano. University of Valladolid.
- Prof. Diego Llanos. University of Valladolid.

Submission

Manuscripts should not exceed 16 pages in length and must be prepared for publication according to the journal's Author Guidelines

All submissions must have at least 50% different material beyond any other previously published work.

Important dates are:

- Submission deadline: September 15th, 2017.
- Results from reviews: November 17th, 2017.
- Submission of revised manuscripts: December 15th, 2017
- Results from final revision: January 23rd 2018.