



# First Workshop on Programmability Issues for Multi-Core Computers (MULTIPROG)

Held in conjunction with:  
the 3rd International Conference on High-Performance Embedded Architectures and Compilers (HiPEAC)  
Goteborg, Sweden, January 27, 2008

As computer manufacturers are embarking on the multi-core roadmap, which promises a doubling of the number of processors on a chip every other year, the programming community is faced with a severe dilemma. Until now, software has been developed with a single processor in mind and it needs to be parallelized to take advantage of the new breed of multi-core computers. As a result, progress in how to easily harness the computing power of multi-core architectures is in great demand.

This workshop aims to bring together, and cause fruitful interaction between, researchers interested in programming models and their implementation and in computer architecture with the common interest in advancing our knowledge how to simplify the task of parallelization of software for multi-core platforms. A wide spectrum of issues are central themes for this workshop such as what the future programming models should look like to accelerate software productivity and how it should be implemented at the runtime, the compiler, and the architecture level.

We will prioritize papers reporting on on-going work that address cross-cutting issues and that provide thought-provoking insights into the main themes. A special issue that contains selected papers is planned for the second issue of [Transactions on HiPEAC](#) in June 2008. All the papers will be published on the workshop informal proceedings.

## Topics of interest

Papers are sought on topics including, but not limited to:

- Multi-core architectures
  - Architectural support for compilers/programming models
  - Processor (core) architecture
  - Memory system architecture
  - Performance/power issues
- Programming models for multi-core architectures
  - Language extensions
  - Run-time systems
  - Compiler optimizations and techniques
- Applications for multi-core architectures
  - Methodologies
  - Benchmarking

## Important dates

Submission deadline: Oct 19, 2007 (extended from Oct 5, 2007)

Notification to authors: Nov 23, 2007

Final version of accepted papers: Dec 14, 2007

## Paper submission

Submitted papers should use the LNCS format and should be 12 pages maximum. Manuscript preparation guidelines can be found at the [LNCS specification web site](#) (go to -> For Authors -> Information for LNCS Authors).

In order to submit your paper go to <http://multiprog.ac.upc.edu/CRP/>

## Organizers

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## Program committee

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## More detailed info at:

<http://multiprog.ac.upc.edu/>