European Conference on Parallel Computing

Topic 7: Parallel Computer Architecture and ILP

http://www.europar2006.de

Description

Instruction-Level Parallelism and parallel processing techniques are present in most contemporary computing systems. The scope of this topic includes (but is not limited to) parallel computer architectures, processor architecture (architecture and microarchitecture), the impact of emerging microprocessor architectures on parallel computer architectures, innovative memory designs to hide and reduce the access latency, multi-threading, and the impact of emerging applications on parallel computer architecture design. Our aim is to bring together researchers in the fields of parallel computer architecture and processor architecture. We invite researchers with interest in both conventional and non-conventional approaches to participate. Papers are being sought on all aspects of parallel computer architecture, processor architecture and microarchitecture, including (but not limited to) the following list of topics.

Focus

- parallel computer architecture
- ILP architectures and designs
- microarchitecture and implementation techniques
- performance evaluation and benchmarking of processor architectures
- multithreaded and multicore processors
- memory system designs
- multiprocessor and vector architectures
- application-specific parallel systems
- stream processing microarchitectures
- network processors
- reconfigurable and asynchronous processors
- power-performance efficient designs

Submission deadline: January 31, 2006

Global Chair
Prof. Dr. Eduard Ayguade
Barcelona Supercomputing Center (BSC)
Technical University of Catalunya (UPC)
eduard@ac.upc.edu

Local Chair
Prof. Dr. Wolfgang Karl
Universität Karlsruhe
Institut für Technische Informatik
Karlsruhe, Germany
karl@ira.uka.de

Vice Chair
Prof. Dr. Koen De Bosschere
Ghent University
ELIS Department
Gent, Belgium
Koen.DeBosschere@elis.ugent.be

Vice Chair
Dr. Jean-Francois Collard
Hewlett-Packard Laboratories
Palo Alto, CA, USA
Jeff.collard@hp.com