



CF '05

2005 ACM International Conference on

Computing Frontiers

Ischia, Italy, April 2005

Sponsored by ACM - SIGMICRO

General Chair

Nader Bagherzadeh, University of California, Irvine, US

Technical Program Chairs

Mateo Valero, UPC, Spain

Alex Ramirez, UPC, Spain

Program Committee

(To be announced)

Special Sessions Chair

Giacomo Sechi, CNR - IASF, IT

Publicity Chair

Ben Juurlink, TU Delft, NL

Publication Chair

Sergio D'Angelo, CNR - IASF, IT

Local Arrangements Chair

Monica Alderighi, CNR - IASF, IT

Registration/Finance Chair

Sally McKee, Cornell University, US

Webmaster

Oliver Santana, UPC, ES

Steering Committee

Monica Alderighi, CNR - IASF, IT

Steven Beaty, Metro State College of Denver, US

Sergio D'Angelo, CNR - IASF, IT

Kemal Ebcioglu, IBM, US

Gearold Johnson, Colorado State University, US

Cecilia Metra, University of Bologna, IT

Vincenzo Piuri, Politecnico Milano, IT

Giacomo Sechi, CNR - IASF, IT

Stamatis Vassiliadis, TU Delft, NL

The increasing needs of present and future computation-intensive applications have stimulated research in new and innovative approaches to the design and implementation of high-performance computing systems. This challenging boundary between state of the art and innovation constitutes the *Computing Frontiers*, which needs to push forward and provide the computational support required for the advancement of all science domains and applications. This conference will focus on a wide spectrum of advanced technologies and radically new solutions and is designed to foster communication between the various scientific areas and disciplines involved.

Authors are invited to submit papers on all areas of innovative computing systems which extend the current frontiers of computer science and engineering and that will provide advanced systems for current and future applications.

Papers are sought on theory, methodologies, technologies, and implementations concerned with innovations in computing paradigms, computational models, architectural paradigms, computer architectures, development environments, compilers, operating environments, *etc.* Papers should be submitted to one of the following tracks (the track program chair is also indicated):

- Non-conventional computing - Olivier Temam
- Grid computing - Frederica Darema
- High performance embedded architectures - Per Stenström
- Reconfigurable computing - Stamatis Vassiliadis
- Supercomputing - Jose Moreira
- Autonomic and Organic computing - Theo Ungerer
- Compilers and Operating Systems - Mike O'Boyle
- Pervasive computing - Achilles Kameas
- Architectures and devices for emerging nanotechnologies - Alvin Lebeck
- Workload characterizations of emerging applications - Koen de Bosschere
- SOC architectures - Antonio Prete
- Temperature, energy, and complexity-aware designs - Pradip Bose
- Special purpose architectures - Alex Veidenbaum
- Computational biology - Guang Gao
- Quantum computing - Peter Burke
- Open topics - Gerry Johnson

PAPER SUBMISSION DEADLINE: NOVEMBER 15, 2004

Submission details and all information concerning the symposium can be found at the conference web site (<http://www.computingfrontiers.org>).

Acceptance/rejection will be emailed by December 30th, 2004. The final manuscript will due January 31th, 2005. Submission implies that at least one author will register at the conference and present the paper.

Conference Web Site:

<http://www.computingfrontiers.org>

Submission Site:

<http://cf05.ac.upc.es>