



CALL FOR PARTICIPATION

2008 ACM International Conference on Computing Frontiers



May 5 - 7, 2008, Ischia, Italy

Sponsored by ACM - SIGMICRO

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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. These challenging boundaries between state of the art and innovation constitute the computing frontiers, which must push forward and provide the computational support required for the advancement of all science domains and applications. This conference focuses 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.

The conference program includes papers on all areas of innovative computing systems that extend the current frontiers of computer science and engineering and that will provide advanced systems for current and future applications:

- Non-conventional computing
- Next-generation high performance computing, esp. novel high-performance systems (including Cell, GPGPU and custom accelerators)
- Applications, programming models and performance analysis of parallel architectures and novel high-performance systems
- Virtualization and virtual machines
- Grid computing
- Compilers and operating systems
- Workload characterization of emerging applications
- Service oriented architecture (SOA) and system impact
- Supercomputing
- SOC architectures, embedded systems and special-purpose architectures
- Temperature, energy, and variability-aware designs
- Fault tolerance and reliability
- System management and security
- Quantum and nanoscale computing
- Computational biology
- Reconfigurable computing and architecture prototyping
- Autonomic and organic computing
- Computation intelligence frontiers: theory and industrial applications

Workshops

Workshop on "Memory Access on Future Processors: A Solved Problem?"

Workshop on "Radiation Effects and Fault Tolerance in Nanometer Technologies"

Important Dates

Early registration deadline: April 4, 2008

Conference hotel rate available until April 18, 2008

For more information visit the conference web site at <http://www.computingfrontiers.org>

