

**8th International Workshop on  
Algorithms, Models and Tools  
for Parallel Computing on Heterogeneous Platforms  
HeteroPar'2010**

August 30, 2010, Ischia-Naples, Italy

held in conjunction with EuroPar 2010

Homepage: <http://heteropar2010.ens-lyon.fr>

Submissions: <https://www.easychair.org/login.cgi?conf=heteropar2010>

**IMPORTANT DATES**

|                            |                 |
|----------------------------|-----------------|
| Submission of manuscripts  | May 30, 2010    |
| Notification of acceptance | July 2, 2010    |
| Deadline for final version | July 30, 2010   |
| Workshop                   | August 30, 2010 |

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**WORKSHOP THEME**

Networks of computers are the most common and available parallel architecture now. Unlike dedicated parallel computer systems, networks are inherently heterogeneous. They consist of diverse computers of different performances interconnected via heterogeneous network equipment providing communication links with different latencies and bandwidths. Traditional parallel algorithms and tools are aimed at homogeneous multi-processors and cannot be efficiently used for parallel computing on heterogeneous networks. New ideas, dedicated algorithms and tools are needed to efficiently use this new type of parallel architectures. The workshop is intended to be a forum for people working on algorithms, programming languages, tools, and theoretical models aimed at efficient problem solutions on heterogeneous networks.

**WORKSHOP SCOPE**

The topics to be covered include but are not limited to:

- Heterogeneous parallel programming paradigms and models;
- Languages, libraries, and interfaces for different heterogeneous parallel programming models;
- Performance models and their integration into the design of efficient parallel algorithms for heterogeneous platforms;
- Parallel algorithms for heterogeneous and/or hierarchical multi-core systems;
- Parallel algorithms for efficient problem solving on heterogeneous platforms (numerical linear algebra, nonlinear systems, fast transforms, computational biology, data mining, multimedia, etc.);
- Software engineering for heterogeneous parallel systems;
- Applications on heterogeneous platforms;
- Integration of parallel and distributed computing on heterogeneous platforms;
- Experience of porting parallel software from supercomputers to heterogeneous platforms;
- Fault tolerance of parallel computations on heterogeneous platforms;
- Algorithms, models and tools for grid, desktop grid, cloud, and green computing.

**SUBMISSION GUIDELINES**

Authors are encouraged to submit original, unpublished research or overviews on Algorithms, Models and Tools for Parallel Computing on Heterogeneous Platforms. Manuscripts should be limited to 10 pages in Springer LNCS style sheet and submitted through the EasyChair Conference System:

<https://www.easychair.org/login.cgi?conf=heteropar2010>.

**PROCEEDINGS**

Accepted papers that are presented at the workshop will be published in revised form in a special Euro-Par Workshop Volume in the Lecture Notes in Computer Science (LNCS) series after the Euro-Par conference.