

Synasc 2005 - Workshops - SCG 2005

SGC 2005 2nd Symbolic Grid Computing Workshop in conjunction with SYNASC-2005 7th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing
Timisoara, Romania
September 25 - 29, 2005

Workshop description

Grid Computing is emerging as a next-generation parallel and distributed computing platform driven by the Internet, Web services technologies, and service-oriented computing architectures. The research area of grid computing is making rapid progress, owing to the increasing necessity of computation in the resolution of complex applications. In this category falls also several symbolic computing applications.

The Symbolic Grid Computing Workshop seeks to provide a bridge between the symbolic computing community and the developers of grid applications.

The workshop goal is to bring together researchers, developers, practitioners, and users,

- to assess the current state-of-the-art
- to identify major needs and opportunities
- to identify the key application requirements and scenarios on the grid
- to exchange ideas and chart future directions
- to gather/spread the information about tools, toolkits and other mechanisms for symbolic computing on grids
- to broaden the symbolic grid computing community by encouraging new users to use the grid technologies and computer algebra systems

The workshop is seeking papers from different areas of grid and symbolic computing, especially those concerned with symbolic computing on the grid.

Topics:

Suggested topics for papers include, but are not limited to, the following:

- * Symbolic computing application requirements towards grids
- * High-performance computing in symbolic computing applications
- * Grid solutions for computation-intensive applications
- * Accessing external services from CAS, network enabled servers
- * Converting existing applications and designing new applications to run on the grid
- * Internet-based computing models and computing services
- * Collaboration technologies
- * Simulations in grid environments
- * Grid application toolkits
- * Security in computational grids
- * Grid-based data mining
- * Extracting knowledge from computational grids
- * Performance evaluation and modeling
- * Virtual scientific experiments and labs
- * Metadata infrastructures for grid computing
- * Task ontologies and service composition languages
- * Agent-architectures for grid environments or based on grid computing technologies

Submission of papers:

Papers of up to 8 pages can be submitted electronically in Latex format (IEEE paper style) to petcu@info.uvt.ro. The papers will be

refereed and accepted on the basis of their scientific merit and relevance to the Workshop topics. Those accepted will be published in the SYNASC'05 post-proceedings (IEEE Computer Press).

Workshop deadlines:

Extended submission of papers: June 20, 2005

Notification of acceptance: July 1, 2005

Final paper: September 1, 2005

Registration: September 1, 2005

Workshop starts: September 25, 2005

Revised papers for post-proceedings: October 20, 2005

Workshop chairs :

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