

**Call for Papers
Workshop PCO'11**

New Trends in Parallel Computing and Optimization

<http://spiderman-2.laas.fr/PCO/>

to be held in conjunction with IEEE IPDPS 2011, Anchorage, USA, May 16-20, 2011

<http://www.ipdps.org> <<http://www.ipdps.org/>>

Paper Submission Deadline: October 15, 2010

Scope of the Workshop:

The workshop on new trends in Parallel Computing and Optimization aims at providing a forum for scientific researchers and engineers on recent advances in the field of parallel or distributed computing for difficult combinatorial optimization problems, like 0-1 multidimensional knapsack problems and cutting stock problems, large scale linear programming problems, nonlinear optimization problems and global optimization problems. Emphasis will be placed on new techniques for the solution of these difficult problems like cooperative methods for integer programming problems and polynomial optimization methods. Aspects related to Combinatorial Scientific Computing (CSC) will also be treated. Finally, the use of new approaches in parallel computing like GPU or hybrid computing, peer to peer computing and cloud computing will be considered. Application to planning, logistics, manufacturing, finance, telecommunications and computational biology will be considered.

Topics:

- * Integer programming, linear programming, nonlinear programming.
- * Global optimization, polynomial optimization.
- * Exact methods, heuristics
- * Parallel algorithms for combinatorial optimization.
- * Parallel metaheuristics.
- * Distributed optimization algorithms.
- * Graph partitioning, preconditioning, Combinatorial Scientific Computing,
- * Hybrid computing and the solution of optimization problems.
- * Peer to peer computing and optimization problems.
- * Applications: planning, logistics, manufacturing, finance, telecommunications, computational biology, combinatorial algorithms in high performance computing.

Important Dates:

Paper submission deadline: October 15, 2010 Notification of acceptance:
December 22, 2010 Camera ready papers due: February 1, 2011
Workshop: May 20, 2011

Submission Details:

Prospective authors should submit their papers through workshop PCO'11 submission system, i.e. EDAS conference management service: <http://www.edas.info/>. Papers must adhere to the formatting rules of IEEE IPDPS 2011 and will undergo the same review process as papers submitted to the IEEE IPDPS Conference.

Chair: Dr Didier El Baz, LAAS-CNRS, France

Program Committee:

J. Baker, Kent State University, USA
A. Boukerche, University of Ottawa, Canada P. Bouvry, University of Luxembourg, Luxembourg U. Catalyurek, Ohio State University, USA M. Elkihel, LAAS-CNRS, France A. Frommer, Bergische Universit?t, Germany M. Hifi, University of Picardie, France B. Le Cun, University of Paris 10, France C. Leon, University of La Laguna, Spain C. Phillips, Sandia National Laboratories, USA E. Talbi, University of Lille, France B. Ucar, ENS Lyon, France J.-P. Watson, Sandia National Laboratory, USA

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