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# Call for Papers Workshop PCO 2013

# Parallel Computing and Optimization <a href="http://conf.laas.fr/PCO13/">http://conf.laas.fr/PCO13/</a>

to be held in conjunction with IEEE IPDPS, Boston, USA, May 24, 2013 http://www.ipdps.org

Paper Submission Deadline: January 4, 2013.

Invited Speaker: Professor Dimitri P. Bertsekas, MIT

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## Scope of the Workshop:

The workshop on 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.
- \* Graph partitioning, preconditioning, Combinatorial Scientific Computing.
- \* Parallel algorithms for combinatorial optimization.
- \* Parallel metaheuristics.
- \* Distributed optimization algorithms.
- \* 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: January 4, 2013 Notification of acceptance: February 19, 2013 Camera ready papers due: February 28, 2013

Workshop: May 24, 2013

Submission details:

Prospective authors should submit their papers through Workshop PCP 2013 submission system, i.e., EDAS conference management service,

## http://edas.info/N13793

Abstract and paper can be uploaded on January 4, 2013.

Authors should preferably follow the manuscript specifications of IEEE IPDPS, i.e., submitted manuscripts may not exceed 10 single-spaced, double column pages using 10-point size font on 8.5x11 inch pages (IEEE conference style) including figures, tables and references. Style templates are available at the

## IPDPS 2013 web page.

Chair: Dr Didier El Baz,

LAAS-CNRS, Toulouse France

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