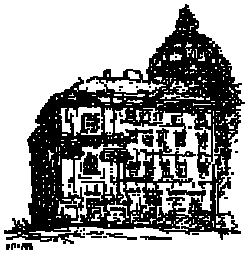
International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems

CP-AI-OR 2005



May 30 - June 1, 2005. Prague, Czech Republic

http://cpaior05.mff.cuni.cz/

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IMPORTANT DATES FOR AUTHORS

Abstracts:	January 10, 2005
Submission:	January 16, 2005
Notification:	February 21, 2005
Final paper:	March 7, 2005
Master Class:	May 29, 2005
CP-AI-OR'05:	May 30-June 1, 2005

SUBMISSIONS
The length of a standard technical paper is 15 pages. The conference proceedings will be published in the Springer Lecture Notes in Computer Science series. For submission please follow the instructions at the URL http://cpaior05.mff.cuni.cz/.

CONFERENCE SITE
The conference will take place in the historical city centre of Prague close to the local attractions like Charles Bridge and Prague Castle.

After a successful series of five CP-AI-OR international workshops (Ferrara, Paderborn, Ashford, Le Croisic, and Montreal) devoted to integration of Constraint Programming, Artificial Intelligence, and Operations Research techniques, in 2004 CP-AI-OR became a conference with the first meeting held in Nice (France) with more than 100 participants. In 2005, the Second CP-AI-OR Conference will be held in Prague (Czech Republic), a beautiful city in the heart of Europe.

The aim of the conference is to bring together interested researchers from AI and OR, and to give them the opportunity to show how the integration of techniques from AI and OR can lead to interesting results on large scale and complex problems. We explicitly welcome new ideas and methods for integrating OR and AI techniques that have arisen from real-world applications.

CP-AI-OR is intended primarily as a forum to focus on the integration and hybridization of the approaches of CP, AI, and OR technologies. A secondary aim is to provide an opportunity for researchers in one area to learn about techniques in others. Therefore, papers that actively combine, integrate or contrast approaches from more than one of the areas are solicited. High quality pure papers from a single area are eligible provided that they are of interest to other communities involved.

The program committee invites submissions that include but are not limited to the following topics:

- Integration of constraint relaxation methods, e.g. Constraint propagation, Cutting planes, Reduced costs, Global constraints, Graph algorithms, Dynamic programming, Lagrangean and convex relaxations, Heuristic functions based on constraint relaxation.
- Integration of search and solving methods, e.g. Branch and bound, Intelligent backtracking, Incomplete search, Randomized search, Column generation and other decomposition methods, Local search, Meta-heuristics.
- Forms of integration, e.g. Static/dynamic problem decomposition, Linking variables and constraints in different solvers, Transformations between models and solvers, Methods using information derived by other solving methods, Collaboration between concurrent methods, models, and solvers.
- Problems, modeling, and applications.

As in previous years, CP-AI-OR'05 will be preceded by a Master Class where leading researchers give introductory and overview talks in a given area. This year, the topic of the Master Class will be Metaheuristics and Constraint Programming. In the morning, an overview of the main metaheuristics will be given by leading researchers in the area and the afternoon will be devoted to some combinations of constraint programming and metaheuristics. The Master Class is intended for PhD students, researchers, and practitioners.