

# CALL FOR PAPERS

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

**CP-AI-OR'06**

May 31-June 2, 2006, Cork, Ireland

<http://tidel.mie.utoronto.ca/cpaior>      [cpaior@mie.utoronto.ca](mailto:cpaior@mie.utoronto.ca)

After a successful series of five international workshops (Ferrara, Paderborn, Ashford, Le Croisic, and Montreal) and two international conferences (Nice, Prague), the third international conference devoted to integration of Constraint Programming, Artificial Intelligence, and Operations Research techniques will be held in Cork, Ireland, in 2006.

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 papers from a single area are eligible provided that they are of interest to other communities involved.

CP-AI-OR'06 will be preceded by a Master Class where leading researchers give introductory and overview talks. This year, the topic of the Master Class will be "Modelling and Solving for Uncertainty and Change." The Master Class is intended for PhD students, researchers, and practitioners.

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.

Papers should be at most 15 pages in length, and should be prepared in the format used for the Springer

Lecture Notes in Computer Science series (<http://www.springer.de/comp/lncs/authors.html>). It is planned that the proceedings will be published in the Springer Lecture Notes in Computer Science series (<http://www.springer.de/comp/lncs/index.html>). All papers are to be submitted electronically in a PDF or PS format by following the instructions at the URL <http://tidel.mie.utoronto.ca/cpaior/>.

Following the conference, authors of all accepted papers will be invited to submit substantially extended versions of their papers to a special issue of the *Annals of Operations Research* devoted to papers from CP-AI-OR'06. These papers will undergo an additional, very thorough refereeing process and a selection of the best papers will be published.

### IMPORTANT DATES FOR AUTHORS

Deadline for paper submissions	January 9, 2006	Master Class	May 30, 2006
Notification of acceptance	February 24, 2006	CP-AI-OR'06	May 31-June 2, 2006
Camera-ready copy	March 7, 2006		

### ORGANIZATION

<b>Program Chairs</b>	Chris Beck, University of Toronto, Canada Barbara Smith, Cork Constraint Computation Centre, Ireland	
<b>Conference Chair</b>	Barry O'Sullivan, Cork Constraint Computation Centre, Ireland	
<b>Master Class Chairs</b>	Ken Brown, Cork Constraint Computation Centre, Ireland Armagan Tarim, Cork Constraint Computation Centre, Ireland	
<b>Publicity Chair</b>	Ian Miguel, University of St. Andrews, Scotland	
<b>Sponsorship Chair</b>	Michela Milano, Universita di Bologna, Italy	
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Bernard Gendron, CRT and Univ. of Montreal, Canada	Helmut Simonis, IC-Parc, UK	

### **Program Committee**

Carmen Gervet, Brown University, USA/IC-Parc, UK	Gilles Trombettoni, Univ. of Nice-Sophia Antipolis, France
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