

CP-AI-OR 2016
May 29 to June 1, 2016
Banff, Canada

CALL FOR PAPERS

The Thirteenth International Conference on Integration of Artificial Intelligence and Operations Research Techniques in Constraint Programming will be held in Banff, Canada, May 29 - June 1, 2016, a Master Class on Decomposition Methods on May 29, and the Main Conference on May 30 - June 1, 2016. The aim of the conference is to bring together interested researchers from Constraint Programming (CP), Artificial Intelligence (AI), and Operations Research (OR) to present new techniques or applications in combinatorial optimization and to provide an opportunity for researchers in one area to learn about techniques in the others. A main objective of this conference series is also to give these researchers the opportunity to show how the integration of techniques from different fields can lead to interesting results on large and complex problems. Therefore papers that actively combine, integrate, or contrast approaches from more than one of the areas are especially solicited. High quality papers from a single area are also welcome, provided that they are of interest to other communities involved. Application papers showcasing CP/AI/OR techniques on novel and challenging applications or experience reports on such applications are strongly encouraged. The program committee invites submissions that include but are not limited to the following topics:

- ◆ Inference and relaxation methods: constraint propagation, cutting planes, global constraints, graph algorithms, dynamic programming, Lagrangian and convex relaxations, heuristic functions based on constraint relaxation.
- ◆ Search methods: branch and bound, intelligent backtracking, incomplete search, randomized search, portfolios, column generation, Benders decompositions or any other decomposition methods, local search, meta-heuristics.
- ◆ Integration methods: solver communication, model transformations and solver selection, parallel and distributed resolution techniques, models, and solvers.
- ◆ Modelling methods: comparison of models, symmetry breaking, uncertainty, dominance relationships.
- ◆ Innovative Applications of CP/AI/OR techniques.
- ◆ Implementation of CP/AI/OR techniques and optimization systems.

Paper submissions are of two types: long papers and short papers.

ORGANIZATION

Conference chair: Bernard Gendron, Université de Montréal

Program chair: Claude-Guy Quimper, Université Laval

Program committee:

Chris Beck, University of Toronto, Canada

Nicolas Beldiceanu, TASC (CNRS/INRIA), Mines Nantes, France

David Bergman, University of Connecticut, USA

Lucas Bordeaux, Microsoft Research, UK

Andre Cire, University of Toronto Scarborough, Canada

Jean-Guillaume Fages, COSLING S.A.S., France

Bernard Gendron, Université de Montréal, Canada

Tias Guns, KU Leuven, Belgium
Emmanuel Hebrard, LAAS, CNRS, France
John Hooker, Carnegie Mellon University, USA
George Katsirelos, INRA, Toulouse, France
Philip Kilby, NICTA and the Australian National University, Australia
Andrea Lodi, DEI, University of Bologna, Italy
Michele Lombardi, DISI, University of Bologna, Italy
Barry O'Sullivan, 4C, University College Cork, Ireland, Ireland
Gilles Pesant, Polytechnique Montréal, Canada
Claude-Guy Quimper, Université Laval, Canada
Jean-Charles Regin, University of Nice-Sophia Antipolis / I3S / CNRS, France
Louis-Martin Rousseau, Polytechnique Montréal, Canada
Pierre Schaus, UCLouvain, Belgium
Christian Schulte, KTH Royal Institute of Technology, Sweden
Meinolf Sellmann, IBM, USA
Paul Shaw, IBM, France
Peter J. Stuckey, University of Melbourne, Australia
Pascal Van Hentenryck, University of Michigan, USA
Willem-Jan Van Hove, Carnegie Mellon University, USA
Petr Vilím, IBM, Czech Republic
Mark Wallace, Monash University, Australia
Toby Walsh, NICTA and UNSW

SUBMISSION SCHEDULE

For long and short papers:

- ◆ Abstracts Due Date: November 13th, 2015
- ◆ Paper Submission Due Date: November, 21st, 2015
- ◆ Rebuttal Phase: December 15th - December 17th, 2015
- ◆ Final Notification: January 9th, 2016
- ◆ Camera-Ready Version Due Date: February 5th, 2016

INSTRUCTIONS FOR LONG PAPERS Long papers should present original unpublished work and be at most 15 pages plus references 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>). These papers will undergo rigorous review. The proceedings will be published in the Springer Lecture Notes in Computer Science series.

Note: Unlike previous CPAIOR conferences the page limit for long papers is 15 LNCS pages *plus references*.

INSTRUCTIONS FOR SHORT PAPERS Short papers are also encouraged, limited to 8 LNCS pages plus references and should be prepared with the same format as long papers. (<http://www.springer.com/computer/lncs>). Although containing less material, short papers should describe original unpublished work and will be reviewed to the same criteria of quality as long papers. It is also encouraged to submit short papers about work in progress on ideas that are interesting but for which the practical or theoretical relevance is not yet fully identified. Short papers will be presented at the conference and published in the conference proceedings.

INSTRUCTIONS FOR JOURNAL FAST TRACK Outstanding submissions to the technical program will be offered the opportunity to be published exclusively through a 'fast track' process in the Constraint Journal. Authors of these papers can opt to extend their paper from 15 to 20 pages plus references (subject to a minor second round of review) and be accepted directly in the journal by the time of the conference. Invited authors who select to fast track their paper will receive a 1 page extended abstract in the conference proceedings and will be invited to present at the conference on the same ground as any other accepted submission. Fast Track Journal papers should be formatted according to the Journal Guidelines (<http://www.springer.com/computer/ai/journal/10601>). The important dates for fast track papers are:

- ◆ Author Opt-in decision: January 15th, 2016
- ◆ Extended submission due for 2nd review: January 29th, 2016
- ◆ Journal Fast Track Decision: February 12th, 2016
- ◆ Camera ready extended abstract (or standard paper): February 19th, 2016
- ◆ Camera ready for Journal Fast Track: March 4th, 2016

Authors who decline to fast track their submission revert to a standard conference submission and are subject to the default formatting, length and date requirements. Papers that do not clear the 2nd review round also revert to conference paper status and their authors are expected to deliver the camera-ready version of the initial submission by February 19th, 2016.

SUBMISSION PROCESS All papers are to be submitted electronically in PDF format by following the instructions on the conference website

<https://symposia.cirrelt.ca/CPAIOR2016>

For any queries on the submission process, please contact the Program Chairs using the email

Claude-Guy.Quimper@ift.ulaval.ca