Preface

The 11th International Conference on the Principles and Practice of Constraint Programming (CP 2005) was held in Sitges (Barcelona), Spain, October 1–5, 2005. Information about the conference can be found on the web at http://www.iiia.csic.es/cp2005/. Information about past conferences in the series can be found at http://www.cs.ualberta.ca/~ai/cp/.

The CP conference series is the premier international conference on constraint programming and is held annually. The conference is concerned with all aspects of computing with constraints, including: algorithms, applications, environments, languages, models and systems.

This year, we received 164 submissions. All of the submitted papers received at least three reviews, and the papers and their reviews were then extensively discussed during an online Program Committee meeting. As a result, the Program Committee chose 48 (29.3%) papers to be published in full in the proceedings and a further 22 (13.4%) papers to be published as short papers. The full papers were presented at the conference in two parallel tracks and the short papers were presented as posters during a lively evening session. Two papers were selected by a subcommittee of the Program Committee—consisting of Chris Beck, Gilles Pesant, and myself—to receive best paper awards. The conference program also included excellent invited talks by Héctor Geffner, Ian Horrocks, Francesca Rossi, and Peter J. Stuckey. As a permanent record, the proceedings contain four-page extended abstracts of the invited talks.

CP 2005 continued the tradition of the CP doctoral program, in which PhD students presented their work, listened to tutorials on career and ethical issues, and discussed their work with senior researchers via a mentoring scheme. This year, the doctoral program received 53 submissions. The field of constraint programming is indeed alive and growing! Each of the PhD students who did not already have a paper in the main conference was given one page in the proceedings to describe their ongoing research. As well, CP 2005 once again held a systems demonstration session to highlight the state of the art in industrial and academic applications, or prototypes. As a permanent record of the session, the proceedings contain a one-page description of each demo.

On the first day of the conference, 13 workshops were held (listed on page IX), each with their own proceedings. Four excellent tutorials were presented during the conference: “SAT Solving and Its Relationship to CSPs” by Fahiem Bacchus; “Advances in Search, Inference and Hybrids for Solving Combinatorial Optimization Tasks” by Rina Dechter; “Programming with a Chinese Horse” by Thom Frühwirth; and “Complete Randomized Backtrack Search Methods: Connections Between Heavy-tails, Backdoors, and Restart Strategies” by Carla Gomes.
On behalf of the constraint programming community, I would like to publicly thank and acknowledge the hard work of the many people involved in putting this year’s conference together. Thank you to Pedro Meseguer and Javier Larrosa, the conference chairs, for their many hours organizing, budgeting, planning, and coordinating that resulted in a most enjoyable conference for the rest of us. Thank you to Michela Milano and Zeynep Kiziltan, the doctoral program chairs, for smoothly and efficiently putting together the largest doctoral program so far. Thank you to Alan Frisch and Ian Miguel, the workshop/tutorial chairs, for their efforts in putting together excellent workshop and tutorial programs. Thank you to Felip Manya, publicity chair, for prompt and efficient handling of the publicity for the conference. Thank you to Chris Beck and Gilles Pesant for their help on the Best Paper Award Committee. Thank you to the Program Committee and the additional referees for their service to the community in writing reviews and extensively discussing and choosing which papers to accept at the conference. It was truly a pleasure to work with all of you. I would also like to add a personal thank you to the Executive Committee of the Association for Constraint Programming for inviting me to be program chair this year. It has been a rewarding experience.

Finally, a thank you to the institutions listed below (page IX) who helped sponsor the conference. Their generosity enabled the conference to bring in invited speakers and fund students, thus greatly contributing to the success of the conference.

September 2005

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Applications of Constraint Satisfaction and Programming to Computer Security
Constraint Propagation and Implementation
Preferences and Soft Constraints
Cooperative Solvers in Constraint Programming
Distributed and Speculative Constraint Processing
Constraint Programming Beyond Finite Integer Domains
Interval Analysis, Constraint Propagation, Applications
Constraint Solving Under Change and Uncertainty
Constraints and Design
Modelling and Reformulating CSPs
Local Search Techniques in Constraint Satisfaction
Quantification in Constraint Programming
Symmetry and Constraint Satisfaction Problems

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X  Organization

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Technical University of Catalonia (UPC)
University of Lleida (UdL)
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