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Frontiers of Combining Systems

4th International Workshop, FroCoS 2002
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Proceedings

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Preface

This volume contains the proceedings of FroCoS 2002, the 4th International Workshop on Frontiers of Combining Systems, held April 8-10, 2002 in Santa Margherita Ligure (near Genova), Italy. Like its predecessors, organized in Munich (1996), Amsterdam (1998), and Nancy (2000), FroCoS 2002 offered a common forum for the presentation and discussion of research activities on the combination and integration of systems in various areas of computer science, such as logic, computation, program development and proof, artificial intelligence, mechanical verification, and symbolic computation.

There were 35 submissions of high quality, authored by researchers from countries including Australia, Belgium, Brazil, Finland, France, Germany, Italy, Portugal, Spain, Singapore, United Kingdom, United States of America, and Yugoslavia. All the submissions were thoroughly evaluated on the basis of at least three referee reports, and an electronic program committee meeting was held through the Internet. The program committee selected 14 research contributions. The topics covered by the selected papers include: combination of logics, combination of constraint solving techniques, combination of decision procedures, combination problems in verification, modular properties of theorem proving, integration of decision procedures and other solving processes into constraint programming and deduction systems.

The workshop program was enriched by four invited talks by Greg Nelson on "Foundations of a Constraint-Based Illustrator", Alessandro Cimatti on "Integrating BDD-based and SAT-based Symbolic Model Checking", Deepak Kapur on "A Rewrite Rule based Framework for Combining Decision Procedures", and Tom F. Melham on "An Investigation into Software Architecture for Embedded Proof Engines", and one tutorial by Thom Fruehwirth and Slim Abdennadher on "Reasoning with, about, and for Constraint Handling Rules".

I would like to thank the many people who made FroCoS 2002 possible. I am grateful to: the members of the program committee and the additional referees named on the following pages for reviewing the papers in a very short time and maintaining the very high standard of FroCoS workshops; the other members of the FroCoS Steering Committee for their advice and encouragement; the invited speakers; and last, but by no means least, Silvio Ranise for handling the software for our web-based reviewing procedure and Luca Compagna for his help in the local organization of the workshop.

January 2002 Alessandro Armando

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