Ingo Dahn Laurent Vigneron (Eds.)

# First-order Theorem Proving

4th International Workshop, FTP 2003 Valencia, Spain, June 12-14, 2003 Proceedings

#### **Volume Editors**

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#### **Preface**

FTP'2003 is the fourth in a series of workshops intended to focus effort on First-Order Theorem Proving as a core theme of Automated Deduction, and to provide a forum for presentation of recent work and discussion of research in progress. The previous workshops of this series were held at Schloss Hagenberg, Austria (1997), Vienna, Austria (1998), St Andrews, Scotland (2000). In 2001, FTP was part of the IJCAR Conference, held in Siena, Italy.

FTP'2003 is one of the three main events of the Federated Conference on Rewriting, Deduction and Programming (RDP'03), together with RTA (the 14th International Conference on Rewriting Techniques and Applications), and TLCA (the 6th International Conference on Typed Lambda Calculi and Applications). FTP'2003 has hold on June 12-14, 2003.

The technical program of FTP'2003 consists of three invited talks, twelve regular papers, two system descriptions and two position papers. The topics of these papers match very well those of the workshop which cover theorem proving in first-order classical, many-valued, modal and description logics, including non-exclusively: resolution, equational reasoning, term-rewriting, model construction, constraint reasoning, unification, description logics, propositional logic, specialized decision procedures; strategies and complexity of theorem proving procedures; implementation techniques and applications of first-order theorem provers to verification, artificial intelligence, mathematics and education.

We sincerely thank everyone who contributed to make this workshop possible. First of all, we would like to thank all the authors who contributed the papers to FTP'2003. We received 19 papers and accepted for presentation 16 of them. We thank the members of the Program Committee and the additional reviewers for their excellent job. We also thank the Steering Committee, and Maria Paola Bonacina in particular, for their advice throughout all phases of the workshop. Finally, we owe a lot to Salvador Lucas and his collaborators of the University of Valencia, who did a very good work at preparing the local arrangements, and publishing these proceedings as Technical Report DSCI-II/10/03 of the Universidad Politécnica of Valencia.

The papers included in this report are preliminary versions. For most of them, the final version is published in the ENTCS series (Electronic Notes in Theoretical Computer Science, http://www.math.tulane.edu/~entcs/), volume 86 no.1.

Valencia, Spain June 2003

Ingo Dahn and Laurent Vigneron

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and all the ELP group at the Universidad Politécnica de Valencia.

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