

Lecture Notes in Artificial Intelligence 4548

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Nicola Olivetti (Ed.)

Automated Reasoning with Analytic Tableaux and Related Methods

16th International Conference, TABLEAUX 2007
Aix en Provence, France, July 3-6, 2007
Proceedings

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Preface

This volume gathers the research papers presented at the International Conference on Automated Reasoning with Analytic Tableaux and Related Methods (TABLEAUX 2007) that took place July 3–6, 2007 in Aix en Provence, France. This conference was the 16th in a series of international meetings held since 1992 (the list is on page VIII).

The Program Committee of TABLEAUX 2007 received 43 submissions, 16 of which were accepted for publication in the present proceedings, while 8 were accepted as position papers.

In addition to the contributed papers, the program included three excellent keynote talks by Piero Bonatti of Università di Napoli, by John-Jules Meyer of Utrecht University, and by Cesare Tinelli of the University of Iowa. Finally, the program was completed by three tutorials of deep interest: “The Tableau Work Bench: Theory and Practice” (Pietro Abate and Rajeev Goré), “Tableau Methods for Interval Temporal Logics” (Valentin Goranko and Angelo Montanari), and “Semistructured Databases and Modal Logic” (Serenella Cerrito).

Tableaux and related methods are a convenient formalism for automating deduction in classical as well as in non-classical logics. The papers collected in this volume witness the wide range of logics being covered: from intuitionistic and substructural logics to modal logics (including temporal and dynamic logics), from many-valued logics to nonmonotonic logics, from classical first-order logic to description logics. Some contributions are focused on decision procedures, others on efficient reasoning, as well as on implementation of theorem provers. A few papers explore applications such as model-checking, verification, or knowledge engineering. Finally, some contributions make use of tableaux as a tool for theoretical investigation of logics. This variety of logics and applications illustrates well the flexibility and the ubiquity of analytic tableaux and related proof methods.

I want to express my gratitude to the invited speakers and to the tutorial presenters who really contributed to making a rich and stimulating conference program. I am very grateful to the members of the Program Committee for their assistance in all phases of the conference and to other reviewers who ensured, together with the Program Committee members, a rigorous selection of the papers. Their effort was decisive to keeping the high scientific standard of the conference. I am also grateful to the members of the Steering Committee for their valuable support. I particularly thank my colleagues of the Local Organizing Committee: Belaid Benhamou, Djamel Habet, Philippe Jégou, Richard Ostrowski, Cyril Pain-Barre, Odile Papini, Nicolas Prcovic, Vincent Risch, Pierre Siegel, Cyril Terrioux, Eric Würbel; they worked hard with a truly cooperative spirit,

making the conference a successful event. A final thanks to the Office of Tourism of Aix en Provence and to Promo Sciences for their professional assistance and services.

July 2007

Nicola Olivetti

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Program and Conference Chair

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1994 Abingdon, UK	2002 Copenhagen, Denmark
1995 St. Goar, Germany	2003 Rome, Italy
1996 Terrasini, Italy	2004 Cork, Ireland (part of IJCAR)
1997 Pont-à-Mousson, France	2005 Koblenz, Germany
1998 Oisterwijk, The Netherlands	2006 Seattle, USA (part of IJCAR)
1999 Saratoga Springs, USA	

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