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# Algebraic Informatics

Third International Conference, CAI 2009  
Thessaloniki, Greece, May 19-22, 2009  
Proceedings



Springer

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# Preface

CAI 2009 was the Third International Conference on Algebraic Informatics. It was intended to cover the topics of algebraic semantics on graphs and trees, formal power series, syntactic objects, algebraic picture processing, finite and infinite computations, acceptors and transducers for strings, trees, graphs, arrays, etc., decision problems, algebraic characterization of logical theories, process algebra, algebraic algorithms, algebraic coding theory, algebraic aspects of cryptography.

CAI 2009 was dedicated to Werner Kuich on the occasion of his retirement. It was held in Thessaloniki, Greece, during May 19-22, 2009 and organized under the auspices of the Department of Mathematics of the Aristotle University of Thessaloniki. The opening lecture was given by Werner Kuich, the tutorials by Alessandra Cherubini and Wan Fokkink, and the other four invited lectures by Bruno Courcelle, Dietrich Kuske, Detlef Plump, and Franz Winkler. This volume contains 2 papers from the tutorials, 5 papers of the invited lectures, and 16 contributed papers. We received 25 submissions, the contributors being from 14 and countries, and the Program Committee selected 16 papers.

We are grateful to the members of the Program Committee for the evaluation of the submissions and the numerous referees who assisted in this work. We should like to thank all the contributors of CAI 2009 and especially the honorary guest Werner Kuich and the invited speakers who kindly accepted our invitation to present their important work. Special thanks are due to Alfred Hofmann the Editorial Director of LNCS, who gave us the opportunity to publish the proceedings of our conference in the LNCS series, as well as to Anna Kramer from Springer for the excellent cooperation. We are also grateful to the members of the Organizing Committee and a group of graduate students who helped us with several organizing jobs. Last but not least we want to express our gratitude to the members of the Steering Committee for their constant interest and especially to Arto Salomaa for his support at Springer.

The sponsors of CAI 2009, OPAP, Aristotle University of Thessaloniki, Attiko Metro S.A., Research Academic Computer Technology Institute (Fronts), and Ziti Publications are gratefully acknowledged.

July 2009

Symeon Bozapalidis  
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