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Preface

These proceedings contain the papers that were presented at the 8th International Conference on Language and Automata Theory and Applications (LATA 2014), held in Madrid, Spain, during March 10–14, 2014.

The scope of LATA is rather broad, including: algebraic language theory; algorithms for semi-structured data mining; algorithms on automata and words; automata and logic; automata for system analysis and program verification; automata, concurrency, and Petri nets; automatic structures; cellular automata; codes; combinatorics on words; compilers; computability; computational complexity; data and image compression; decidability issues on words and languages; descriptional complexity; digital libraries and document engineering; DNA and other models of bio-inspired computing; foundations of finite state technology; foundations of XML; fuzzy and rough languages; grammars (Chomsky hierarchy, contextual, unification, categorial, etc.); grammatical inference and algorithmic learning; graphs and graph transformation; language varieties and semigroups; language-based cryptography; language-theoretic foundations of artificial intelligence and artificial life; natural language and speech automatic processing; parallel and regulated rewriting; parsing; patterns; power series; quantum, chemical and optical computing; semantics; string and combinatorial issues in computational biology and bioinformatics; string processing algorithms; symbolic dynamics; symbolic neural networks; term rewriting; transducers; trees, tree languages and tree automata; weighted automata.

LATA 2014 received 116 submissions. Each one was reviewed by three Program Committee members, many of whom consulted with external referees. After a thorough and vivid discussion phase, the committee decided to accept 45 papers (which represents an acceptance rate of 38.79%). The conference program also included four invited talks and one invited tutorial. Part of the success in the management of such a large number of submissions is due to the excellent facilities provided by the EasyChair conference management system.

We would like to thank all invited speakers and authors for their contributions, the Program Committee and the reviewers for their cooperation, and Springer for its very professional publishing work.

December 2013

Adrian-Horia Dediu
Carlos Martín-Vide
José-Luis Sierra
Bianca Truthe

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LATA 2014 was organized by the Research Group on Implementation of Language-Driven Software and Applications, ILSA, from Complutense University of Madrid and the Research Group on Mathematical Linguistics, GRLMC, from Rovira i Virgili University, Tarragona.

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