

Preface

The DLT 2016 Conference was organized by the Laboratoire de Combinatoire et d'Informatique mathématique (LaCIM) during July 25–28, 2016. It was the 20th edition of a series initiated in 1993 by G. Rozenberg and A. Salomaa in Turku (Finland). These conferences took place every odd year in the first editions: Magdeburg, Germany (1995), Thessaloniki, Greece (1997), Aachen, Germany (1999), and Vienna, Austria (2001). Since then, the event was held in Europe on every odd year and outside Europe on every even year. The locations of DLT conferences since 2002 have been: Kyoto, Japan (2002), Szeged, Hungary (2003), Auckland, New Zealand (2004), Palermo, Italy (2005), Santa Barbara, California, USA (2006), Turku, Finland (2007), Kyoto, Japan (2008), Stuttgart, Germany (2009), London, Ontario, Canada (2010), Milan, Italy (2011), Taipei, Taiwan (2012), Marne-la-Vallée, France (2013), Ekaterinburg, Russia (2014), Liverpool (2015).

This series of International Conferences on Developments in Language Theory provides a forum for presenting current developments in formal languages and automata. Its scope is very general and includes, among others, the following topics and areas: combinatorial and algebraic properties of words and languages; grammars, acceptors and transducers for strings, trees, graphs, arrays; algebraic theories for automata and languages; codes; efficient text algorithms; symbolic dynamics; decision problems; relationships to complexity theory and logic; picture description and analysis; polyominoes and bidimensional patterns; cryptography; concurrency; cellular automata; bio-inspired computing; quantum computing.

This volume of *Lecture Notes in Computer Science* contains the papers that were presented at DLT 2016. There were 48 submissions and each of them was reviewed by at least three reviewers. The selection process was undertaken by the Program Committee with the help of generous reviewers who accepted to participate in the selection of 32 papers within a tight schedule. The present volume also includes the abstracts of the lectures given by four invited speakers

- Valérie Berthé: “Tree Sets: From Bifix Codes to Algebraic Word Combinatorics”
- Emilie Charlier: “Permutations and Shifts”
- Cédric Chauve: “Counting, Generating, and Sampling Tree Alignments”
- Janusz A. (John) Brzozowski: “Towards a Theory of Complexity for Regular Languages”

We warmly thank Valérie, Émilie, Cédric, and Janusz for delivering sound lectures intended for a large audience. We take this opportunity to thank all authors for their submissions and the anonymous reviewers who provided numerous and constructive reviews that led to the selection of high-standard contributions.

Special thanks are due to Alfred Hofmann and the *Lecture Notes in Computer Science* team at Springer for having granted us the opportunity to publish this special issue devoted to DLT 2016 and for their help during the final stages.

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Finally, we were fortunate to have a number of collaborators who contributed to the success of the conference: the secretary Johanne Patoine, our postdoctoral fellows Mathieu Guay-Paquet and Nathan Williams, our students Mélodie Lapointe, Nadia Lafrenière, and Hugo Tremblay. Our warmest thanks for their invaluable assistance and contribution in the organization of the event.

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