



This special issue of Discrete Mathematics & Theoretical Computer Science is dedicated to the second edition of the conference *AutoMathA: from Mathematics to Applications*. It was held at the Institute of Mathematics of the University of Liège, Belgium, From 8th to 12th June 2009. A first edition of this conference took place in Mondello, Italy, in June 2007.

This event is the main conference of the AutoMathA programme of the European Science Foundation. This five-year multidisciplinary programme 2005 - 2010, at the crossroads of mathematics, theoretical computer science and applications, gathers 14 European countries. The goal of AutoMathA is to propose a set of co-ordinated actions for advancing the theory of automata and for increasing its application to challenging scientific problems.

The conference consisted of 12 invited talks: J. Berstel, A. Bertoni, Z. Ésik, I. Walukiewicz, J.-F. Raskin, A. de Luca, F. D'Alessandro, N. Schweikardt, S. Dolev, H. J. Hoogeboom, M. Bojańczyk and 21 contributed talks. We had 72 participants working in Belgium, Estonia, Finland, France, Germany, Hungary, Israel, Italy, the Netherlands, Poland, Portugal, Romania, Russia, Switzerland and Turkey.

The session of Wednesday 10th was devoted to the memory of Stefano Varricchio and his contribution to theoretical computer science and mathematics with special talks given by Aldo de Luca, Christian Choffrut and Flavio D'Alessandro.

Submission to this special issue was open to papers in any of the areas related to the AutoMathA programme.

We would like to thanks all the participants, the invited speakers, the program committee of the conference and the anonymous referees who made possible this event and special issue. Each paper has been peer-reviewed. We would also like to thank again the European Science Foundation, the University of Liège and the Belgian funds for research FNRS for their support.

V. Bruyère, J.-E. Pin, A. Restivo and M. Rigo,
Liège, 4th October 2010.