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Foreword

The 7th International Conference on Lattice Path Combinatorics and Applications was held in Sienna from 4-7 July, 2010, and was organized by the Dipartimento di Scienze Matematiche e Informatiche, University of Sienna, in cooperation with the Dipartimento di Sistemi e Informatica, University of Florence.

Papers were sought in a wide spectrum of areas, for instance, lattice path enumeration, bijective and algebraic combinatorics, non parametric statistical inference, random walks, discrete distribution, analysis of algorithms, graph theory, and queueing theory.

A large Scientif c Committee, guaranteeing wide coverage of subtopics and expertise in a variety of f elds, selected 37 papers for presentation as talks, and selected 14 other papers for presentation as posters. Furthermore, one plenary lecture was given by Anthony J. Guttmann, University of Melbourne, an outstanding researcher in combinatorics who studied several models of lattice paths.

The present volume collects18enriched and extended versions of the papers presented in Sienna. All papers have been referred and we thank all referees for their assistance.

Altogether, the papers collected here offer a snapshot of current research. At the same time, they illustrate the numerous ramif cations of the combinatorics of lattice paths throughout statistics, mathematics and computer science. Thus we hope that this volume will serve both as a reference text and as an introduction to many fascinating aspects of this f eld.

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