

Preface

The International Conference on Queueing Theory and Network Applications aims to promote the knowledge and the development of high-quality research on queueing theory and its applications in networks and other related fields. It brings together researchers, scientists, and practitioners from the world and offers an open forum to share the latest important research accomplishments and challenging problems in the area of queueing theory and network applications.

This volume contains papers selected and presented at the 12th International Conference on Queueing Theory and Network Applications (QTNA 2017) held during August 21–23, 2017, in Qinhuangdao, China. The conference is organized by Yanshan University, China, and by the following sponsors: Academy of Mathematics and Systems Science, Chinese Academy of Sciences, National Natural Science Foundation of China, and Springer.

QTNA 2017 was a continuation of the series of successful QTNA conferences: QTNA 2006 (Seoul, Korea), QTNA 2007 (Kobe, Japan), QTNA 2008 (Taipei, Taiwan), QTNA 2009 (Singapore), QTNA 2010 (Beijing, China), QTNA 2011 (Seoul, Korea), QTNA 2012 (Kyoto, Japan), QTNA 2013 (Taichung, Taiwan), QTNA 2014 (Bellingham, USA), QTNA 2015 (Hanoi, Vietnam), and QTNA 2016 (Wellington, New Zealand).

We received 65 submissions from Belgium, China, Hong Kong, Japan, The Netherlands, Singapore, South Korea, Taiwan, USA, and UK. All papers were peer reviewed and evaluated on the quality, originality, soundness, and significance of their contributions by the members of the Technical Program Committee of QTNA 2017 and 19 papers were accepted as full papers appearing in this LNCS proceedings published by Springer.

In addition, 37 short papers were accepted to be presented at QTNA 2017. The papers presented disseminate the latest results covering up-to-date research fields such as performance modeling and analysis of telecommunication systems, retrial and vacation queueing models, optimization of queueing systems, modeling of social systems, and other application areas.

It is also our privilege to have had Profs. David D. Yao, Guy Latouche, Mu-Fa Chen, and Zhisheng Niu to give us keynote talks, and Profs. Minghua Chen, Longbo Huang, and Pengfei Guo to deliver invited talks at QTNA 2017.

The proceedings show that the potential of queueing theory is to be exploited, and this is a significant opportunity and a challenge for all of researchers, PhD and graduate students in queueing theory and its applications to share recent achievements and discoveries and create new friendships for future collaborative works.

We would like to thank the authors of papers for contributing their excellent technical contributions and new theoretical results to this book. Special thanks go to the co-chairs and members of the Technical Program Committee of QTNA 2017 for their contribution to keeping the high quality of the selected papers. We would also like to

express our gratitude to the co-chairs and members of the local Organizing Committee for their hard work throughout the process from planning to holding the conference. Finally, we cordially thank Springer for support in publishing this volume.

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