15th Conference on the Theory of Quantum Computation, Communication and Cryptography

TQC 2020, June 9–12, 2020, Riga, Latvia

Edited by

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Editors

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[1] Note of the publisher: Unfortunately, this article was accidentally skipped in the first version of the conference proceedings published on June 8, 2020 and was subsequently published on August 19, 2020.

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Preface

The 15th Conference on the Theory of Quantum Computation, Communication and Cryptography was hosted by the University of Latvia, and held online from June 9–12, 2020.

Quantum computation, quantum communication, and quantum cryptography are subfields of quantum information processing, an interdisciplinary field of information science and quantum mechanics. The TQC conference series focuses on theoretical aspects of these subfields. The objective of the conference is to bring together researchers so that they can interact with each other and share problems and recent discoveries.

A list of the previous editions of TQC follows:

- TQC 2019, University of Maryland, USA
- TQC 2018, University of Technology Sydney, Australia
- TQC 2017, Université Pierre et Marie Curie, France
- TQC 2016, Freie Universität Berlin, Germany
- TQC 2015, Université libre de Bruxelles, Brussels, Belgium
- TQC 2014, National University of Singapore, Singapore
- TQC 2013, University of Guelph, Canada
- TQC 2012, University of Tokyo, Japan
- TQC 2011, Universidad Complutense de Madrid, Spain
- TQC 2010, University of Leeds, UK
- TQC 2009, Institute for Quantum Computing, University of Waterloo, Canada
- TQC 2008, University of Tokyo, Japan
- TQC 2007, Nara Institute of Science and Technology, Nara, Japan
- TQC 2006, NTT R&D Center, Atsugi, Kanagawa, Japan

The conference consisted of invited talks, contributed talks, a poster session, a rump session, and a business meeting. The invited talks were given by Elena Kirshanova (Immanuel Kant Baltic Federal University), Thomas Monz (University of Innsbruck), Xin Wang (Baidu Research), and Henry Yuen (University of Toronto).

The conference was possible thanks to financial support from the European Regional Development Fund (project 1.1.1.5/18/I/016), Baidu, and the University of Latvia.

We wish to thank the members of the Program Committee and all subreviewers for their precious help. Our warm thanks also go to the members of the Local Organizing Committee, for their considerable efforts in organizing the conference. We would like to thank Michael Wagner (Dagstuhl Publishing) for his technical help. Finally, we would like to thank the members of the Steering Committee for giving us the opportunity to work for TQC. And, of course, all contributors and participants!

April 2020
Steven T. Flammia

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