

# Preface

ICITS 2017, the 10th International Conference on Information Theoretic Security, was held in Hong Kong, China, during November 29 – December 2, 2017. The conference took place on the campus of The Chinese University of Hong Kong. ICITS 2017 was held in cooperation with the International Association for Cryptologic Research (IACR), and supported by IEEE Information Theory Society Hong Kong Chapter. The General Chair of the conference was Kenneth Shum.

ICITS is the successor conference to the 2005 IEEE Information Theory Workshop on Theory and Practice in Information Theoretic Security, held on Awaji Island, Japan. It is now an international conference which deals with all aspects of information-theoretic security and brings together researchers from various areas including cryptography, information theory, and quantum computing. Information-theoretic security is the cryptographic security that does not depend on computational assumptions, and it is achieved by utilizing techniques or methods from various fields such as information theory, discrete mathematics, and quantum physics.

ICITS 2017 had two tracks, a conference track and a workshop track, as did the previous ICITS. This two-track format was started with ICITS 2012, and it has the advantage of bringing together researchers from various areas with different publication cultures. The proceedings contain the accepted papers for the conference track. The accepted works for the workshop track were presented at the conference but do not appear in this volume. The list of the contributions in the workshop track is given before the Table of Contents.

The Program Committee received a total of 42 submissions, of which 12 were accepted for the conference track and 7 for the workshop track. All submitted papers were reviewed by at least 3 members of the Program Committee, who sometimes were assisted by external reviewers.

In addition to the 19 contributed presentations, there were 6 invited talks:

- “Randomness Extraction in the Quantum World” by Kai-Min Chung, Academia Sinica, Taiwan
- “Sufficiently Myopic Adversaries Are Blind” by Sidharth Jaggi, The Chinese University of Hong Kong, Hong Kong
- “Quantum Wiretap Channel Coding and Information Spectrum Methods” by Tomohiro Ogawa, The University of Electro-Communications, Japan
- “A Unified Paradigm of Organized Complexity and Semantic Information Theory” by Tatsuki Okamoto, NTT, Japan
- “Physical Assumptions for Long-Term Secure Communication” by Rei Safavi-Naini, University of Calgary, Canada
- “Secret Sharing Schemes: Some New Approaches and Problems” by Huaxiong Wang, Nanyang Technological University, Singapore

I would like to thank all the people who have contributed to the success of ICITS 2017. First of all, I would like to thank all the authors who submitted their papers to ICITS 2017. I would also like to thank all members of the Program Committee, who completed the reviews in a timely and professional manner. It was a great honor for me to work together with them. Moreover, I would like to thank the Steering Committee of ICITS, in particular Yvo Desmedt and Rei Safavi-Naini, for their kind support from the initial stage of the conference. I am grateful to the Program Chairs of previous conferences for their advice and assistance, in particular Anderson Nascimento, Stefan Wolf, and Anja Lehmann. I would especially like to thank the General Chair, Kenneth Shum, for organizing and managing the wonderful conference ICITS 2017, and the Treasurer, Chee Wei, for financial management, Wei Kang for taking charge of publicity, and Hoover Yin for designing the website of the conference. I would also like to thank the CANS 2017 program co-chairs, Sran Ćapkun and Sherman S. M. Chow, and the CANS 2017 General Chair, Kehuan Zhang, for the collaboration, because ICITS and CANS were co-located in the campus of The Chinese University of Hong Kong from November 29 to December 2, 2017. Finally, I would like to thank Alfred Hofmann, Elke Werner, and Anna Kramer and other LNCS staff at Springer for their help in publishing the proceedings. Our sponsor was the Institute of Network Coding, The Chinese University of Hong Kong.

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