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# Advances in Cryptology – ASIACRYPT 2011

17th International Conference on the Theory and Application of Cryptology and Information Security Seoul, South Korea, December 4-8, 2011 Proceedings



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#### Preface

ASIACRYPT 2011, the 17th International Conference on Theory and Application of Cryptology and Information Security, was held during December 4–8 in the Silla Hotel, Seoul, Republic of Korea. The conference was sponsored by the International Association for Cryptologic Research (IACR) in cooperation with Korea Institute of Information Security and Cryptology (KIISC), Digital Contents Society (DCS), Korea Internet Security Agency (KISA), and National Security Research Institute (NSRI). It was also co-sponsored by the Center for Information Security Technologies of Korea University (CIST), the Korean Federation of Science and Technology Societies (KOFST), Seoul National University, Electronics and Telecommunications Research Institute (ETRI), and Seoul Metropolitan Government.

We received 266 valid submissions, of which 42 were accepted for publication. With two pairs of papers merged, these proceedings contain the revised versions of 40 papers. The Program Committee (PC) was aided by 243 external reviewers. Every paper received at least three independent reviews, and papers with PC contributions got five or more. Several questions from PC members to authors were relayed in order to increase the quality of submissions. ASIACRYPT 2011 used a rolling Co-chair model and we made all decisions by consensus by sharing a great deal of e-mails.

For the Best Paper Award, the PC selected "A Framework for Practical Universally Composable Zero-Knowledge Protocols" by Jan Camenisch, Stephan Krenn, and Victor Shoup and "Counting Points on Genus 2 Curves with Real Multiplication" by Pierrick Gaudry, David Kohel, and Benjamin Smith. There were two invited talks; Joan Daemen delivered "15 Years of Rijndael" on December 6 and Úlfar Erlingsson spoke on "Securing Cloud Computing Services" on December 7.

We would like to thank the authors of all submissions regardless of whether their papers were accepted or not. Their work made this conference possible. We are extremely grateful to the PC members for their enormous investment of time and effort in the difficult and delicate process of review and selection. A list of PC members and external reviewers can be found on succeeding pages of this volume. We would like to thank Hyoung Joong Kim, who was the General Chair in charge of the local organization and finances. Special thanks go to Shai Halevi for providing and setting up the splendid review software. We are most grateful to Kwangsu Lee and Jong Hwan Park, who provided support for the entire ASIACRYPT 2011 process. We are also grateful to Masayuki Abe, the ASIACRYPT 2010 Program Chair, for his timely information and replies to the host of questions we posed during the process.

September 2011

Dong Hoon Lee Xiaoyun Wang

# ASIACRYPT 2011

# The 17th Annual International Conference on the Theory and Application of Cryptology and Information Security

December 4–8, 2011, Seoul, Korea

 $Sponsored\ by$  the International Association of Cryptologic Research (IACR)

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