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Fast
Software Encryption

17th International Workshop, FSE 2010
Seoul, Korea, February 7-10, 2010
Revised Selected Papers

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Volume Editors

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Preface

Fast Software Encryption (FSE) 2010, the 17th in a series of workshops on symmetric cryptography, was held in Seoul, Korea, during February 7–10, 2010. Since 2002, the FSE workshop has been sponsored by the International Association for Cryptologic Research (IACR). The first FSE workshop was held in Cambridge, UK (1993), followed by workshops in Leuven, Belgium (1994), Cambridge, UK (1996), Haifa, Israel (1997), Paris, France (1998), Rome, Italy (1999), New York, USA (2000), Yokohama, Japan (2001), Leuven, Belgium (2002), Lund, Sweden (2003), New Delhi, India (2004), Paris, France (2005), Graz, Austria (2006), Luxembourg, Luxembourg (2007), Lausanne, Switzerland (2008), and Leuven, Belgium (2009). The FSE workshop concentrates on fast and secure primitives for symmetric cryptography, including the design and analysis of block ciphers, stream ciphers, encryption schemes, analysis and evaluation tools, hash functions, and message authentication codes.

This year 67 papers were submitted. Each paper was reviewed by at least three reviewers, and papers (co-)authored by Program Committee members were reviewed by at least five reviewers. From the 67 papers, 21 were accepted for presentation at the workshop, and these proceedings contain the revised versions of the papers. At the end of the review phase, the Program Committee selected the paper "Attacking the Knudsen-Preneel Compression Functions" by Onur Özen, Thomas Shrimpton, and Martijn Stam to receive the best paper award. The workshop also featured two invited talks, "The Survey of Cryptanalysis on Hash Functions" by Xiaoyun Wang and "A Provable-Security Perspective on Hash Function Design" by Thomas Shrimpton. Along with the presentation of the papers and the invited talks, the rump session was organized and chaired by Orr Dunkelman.

We would like to thank all the authors for submitting their papers to the workshop. The selection of the papers was a challenging task, and we are deeply grateful to the Program Committee and to all the external reviewers for their hard work to ensure that each paper received a thorough and fair review. We would like to thank Shai Halevi for letting us use his Web Submission and Review Software, which was used for the entire review process from paper submission to preparing these proceedings.

We would also like to thank the General Co-chairs, Jongin Lim and Jongsung Kim, for their hard work, and we also would like to express our gratitude to CIST, Korea University and Korea Institute of Information Security and Cryptology (KIISC) for their support in organizing the workshop. The financial support given to the FSE 2010 workshop by Electronics and Telecommunications Research Institute (ETRI), Ellipsis, Korea University, LG CNS, and National Institute for Mathematical Science (NIMS) is also gratefully acknowledged.

April 2010
Seokhie Hong
Tetsu Iwata

FSE 2010

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