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Tal Malkin · Chris Peikert (Eds.)

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Editors
Tal Malkin
Columbia University
New York City, NY, USA

Chris Peikert
University of Michigan
Ann Arbor, MI, USA

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Preface

The 41st International Cryptology Conference (Crypto 2021), sponsored by the International Association of Cryptologic Research (IACR), was held during August 16–20, 2021. Due to the ongoing COVID-19 pandemic, and for the second consecutive year, Crypto was held as an online-only virtual conference, instead of at its usual venue of the University of California, Santa Barbara. In addition, six affiliated workshop events took place during the days immediately prior to the conference.

The Crypto conference continues its substantial growth pattern: this year's offering received a record-high 430 submissions for consideration, of which 103 (also a record) were accepted to appear in the program. The two program chairs were not allowed to submit a paper, and Program Committee (PC) members were limited to two submissions each. Review and extensive discussion occurred from late February through mid-May, in a double-blind, two-stage process that included an author rebuttal phase (following the initial reviews) and extensive discussion by reviewers. We thank the 58-person PC and the 390 external reviewers for their efforts to ensure that, during the continuing COVID-19 pandemic and unusual work and life circumstances, we nevertheless were able to perform a high-quality review process.

The PC selected four papers to receive recognition via awards, along with invitations to the Journal of Cryptology, via a voting-based process that took into account conflicts of interest (the program chairs did not vote).

- The Best Paper Award went to "On the Possibility of Basing Cryptography on $\mathtt{EXP} \neq \mathtt{BPP}$" by Yanyi Liu and Rafael Pass.
- The Best Paper by Early Career Researchers Award, along with an Honorable Mention for Best Paper, went to "Linear Cryptanalysis of FF3-1 and FEA" by Tim Beyne.
- Honorable Mentions for Best Paper also went to "Efficient Key Recovery for all HFE Signature Variants" by Chengdong Tao, Albrecht Petzoldt, and Jintai Ding; and "Three Halves Make a Whole? Beating the Half-Gates Lower Bound for Garbled Circuits" by Mike Rosulek and Lawrence Roy.

In addition to the regular program, Crypto 2021 included two invited talks, by Vanessa Teague on "Which e-voting problems do we need to solve?" and Jens Groth on "A world of SNARKs." The conference also carried forward the long-standing tradition of having a rump session, organized in a virtual format.

The chairs would also like to thank the many other people whose hard work helped ensure that Crypto 2021 was a success:

- Vladimir Kolesnikov (Georgia Institute of Technology)—Crypto 2021 general chair.
- Daniele Micciancio (University of California, San Diego), Thomas Ristenpart (Cornell Tech), Yevgeniy Dodis (New York University), and Thomas Shrimpton (University of Florida)—Crypto 2021 Advisory Committee.

- Carmit Hazay (Bar Ilan University)—Crypto 2021 workshop chair.
- Bertram Poettering and Antigoni Polychroniadou—Crypto 2021 rump session chairs.
- Kevin McCurley, for his critical assistance in setting up and managing the HotCRP paper submission and review system, conference website, and other technology.
- Kevin McCurley, Kay McKelly, and members of the IACR's emergency pandemic team for their work in designing and running the virtual format.
- Anna Kramer and her colleagues at Springer.

July 2021

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