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# Advances in Cryptology – EUROCRYPT 2021

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and Applications of Cryptographic Techniques  
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# Preface

Eurocrypt 2021, the 40th Annual International Conference on the Theory and Applications of Cryptographic Techniques, was held in Zagreb, Croatia, during October 17–21, 2021.<sup>1</sup> The conference was sponsored by the International Association for Cryptologic Research (IACR). Lejla Batina (Radboud University, The Netherlands) and Stjepan Picek (Delft University of Technology, The Netherlands) were responsible for the local organization.

We received a total of 400 submissions. Each submission was anonymized for the reviewing process and was assigned to at least three of the 59 Program Committee (PC) members. PC members were allowed to submit at most two papers. The reviewing process included a rebuttal round for all submissions. After extensive deliberations the PC accepted 78 papers. The revised versions of these papers are included in this three-volume proceedings.

The PC decided to give Best Paper Awards to the papers “*Non-Interactive Zero Knowledge from Sub-exponential DDH*” by Abhishek Jain and Zhengzhong Jin, “*On the (in)security of ROS*” by Fabrice Benhamouda, Tancrède Lepoint, Julian Loss, Michele Orrù, and Mariana Raykova and “*New Representations of the AES Key Schedule*” by Gaëtan Leurent and Clara Pernot. The authors of these three papers received an invitation to submit an extended version of their work to the *Journal of Cryptology*. The program also included invited talks by Craig Gentry (Algorand Foundation) and Sarah Meiklejohn (University College London).

We would like to thank all the authors who submitted papers. We know that the PC’s decisions can be very disappointing, especially rejections of good papers which did not find a slot in the sparse number of accepted papers. We sincerely hope that these works will eventually get the attention they deserve.

We are indebted to the PC and the external reviewers for their voluntary work. Selecting papers from 400 submissions covering the many areas of cryptologic research is a huge workload. It has been an honor to work with everyone. We owe a big thank you to Kevin McCurley for his continuous support in solving all the minor issues we had with the HotCRP review system, to Gaëtan Leurent for sharing his MILP programs which made the papers assignments much easier, and to Simona Samardjiska who acted as Eurocrypt 2021 webmaster.

Finally, we thank all the other people (speakers, sessions chairs, rump session chairs...) for their contribution to the program of Eurocrypt 2021. We would also like to thank the many sponsors for their generous support, including the Cryptography Research Fund that supported student speakers.

April 2021

Anne Canteaut  
François-Xavier Standaert

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<sup>1</sup> This preface was written before the conference took place, under the assumption that it will take place as planned in spite of travel restrictions due to COVID-19.

# Eurocrypt 2021

**The 40th Annual International Conference on the Theory  
and Applications of Cryptographic Techniques**

Sponsored by the *International Association for Cryptologic Research*  
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October 17–21, 2021

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# Contents – Part III

## Garbled Circuits

LogStack: Stacked Garbling with $O(b \log b)$ Computation . . . . .	3
<i>David Heath and Vladimir Kolesnikov</i>	
Large Scale, Actively Secure Computation from LPN and Free-XOR Garbled Circuits . . . . .	33
<i>Aner Ben-Efraim, Kelong Cong, Eran Omri, Emmanuela Orsini,     Nigel P. Smart, and Eduardo Soria-Vazquez</i>	
Threshold Garbled Circuits and Ad Hoc Secure Computation . . . . .	64
<i>Michele Ciampi, Vipul Goyal, and Rafail Ostrovsky</i>	

## Indistinguishability Obfuscation

Indistinguishability Obfuscation from Simple-to-State Hard Problems: New Assumptions, New Techniques, and Simplification . . . . .	97
<i>Romain Gay, Aayush Jain, Huijia Lin, and Amit Sahai</i>	
Candidate Obfuscation via Oblivious LWE Sampling . . . . .	127
<i>Hoeteck Wee and Daniel Wichs</i>	

## Non-Malleable Commitments

Black-Box Non-interactive Non-malleable Commitments . . . . .	159
<i>Rachit Garg, Dakshita Khurana, George Lu, and Brent Waters</i>	
Non-interactive Distributional Indistinguishability (NIDI) and Non-malleable Commitments . . . . .	186
<i>Dakshita Khurana</i>	

## Zero-Knowledge Proofs

Public-Coin Statistical Zero-Knowledge Batch Verification Against Malicious Verifiers . . . . .	219
<i>Inbar Kaslasi, Ron D. Rothblum, and Prashant Nalini Vasudevanr</i>	
Efficient Range Proofs with Transparent Setup from Bounded Integer Commitments . . . . .	247
<i>Geoffroy Couteau, Michael Kloof, Huang Lin, and Michael Reichle</i>	

Towards Accountability in CRS Generation . . . . .	278
<i>Prabhanjan Ananth, Gilad Asharov, Hila Dahari, and Vipul Goyal</i>	
<b>Property-Preserving Hash Functions and ORAM</b>	
Robust Property-Preserving Hash Functions for Hamming Distance and More . . . . .	311
<i>Nils Fleischhacker and Mark Simkin</i>	
Alibi: A Flaw in Cuckoo-Hashing Based Hierarchical ORAM Schemes and a Solution . . . . .	338
<i>Brett Hemenway Falk, Daniel Noble, and Rafail Ostrovsky</i>	
Structured Encryption and Dynamic Leakage Suppression . . . . .	370
<i>Marilyn George, Seny Kamara, and Tarik Moataz</i>	
<b>Blockchain</b>	
Dynamic Ad Hoc Clock Synchronization . . . . .	399
<i>Christian Badertscher, Peter Gaži, Aggelos Kiayias, Alexander Russell,         and Vassilis Zikas</i>	
TARDIS: A Foundation of Time-Lock Puzzles in UC . . . . .	429
<i>Carsten Baum, Bernardo David, Rafael Dowsley, Jesper Buus Nielsen,         and Sabine Oechsner</i>	
<b>Privacy and Law Enforcement</b>	
On the Power of Multiple Anonymous Messages: Frequency Estimation and Selection in the Shuffle Model of Differential Privacy . . . . .	463
<i>Badih Ghazi, Noah Golowich, Ravi Kumar, Rasmus Pagh,         and Ameya Velingker</i>	
Non-Interactive Anonymous Router . . . . .	489
<i>Elaine Shi and Ke Wu</i>	
Bifurcated Signatures: Folding the Accountability vs. Anonymity Dilemma into a Single Private Signing Scheme . . . . .	521
<i>Benoît Libert, Khoa Nguyen, Thomas Peters, and Moti Yung</i>	
Abuse Resistant Law Enforcement Access Systems . . . . .	553
<i>Matthew Green, Gabriel Kaptchuk, and Gijs Van Laer</i>	
<b>Author Index</b> . . . . .	585