

Christian Majenz

List of publications

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Overview

- Conference papers: 9
- Journal articles: 8
- Preprints: 6
- Citations: 497, H-index: 13
(According to google scholar as of September 3, 2021)
- ORCID: <https://orcid.org/0000-0002-1877-8385>
- **Cryptography:** Crypto (3x), Eurocrypt (4x), Asiacrypt, ITC, 6 preprints
- **Quantum information theory:** Nature Communications, Physical Review letters (3x), Physical Review A (2x), 1 preprint
- **Mathematics of quantum computation:** Communications in Mathematical Physics, Quantum

(Some of) my articles can be found on arXiv.org, eprint and dblp.

Peer reviewed conference papers

- 1 Gorjan Alagic and Christian Majenz, *Quantum non-malleability and authentication*, Advances in Cryptology – Crypto 2017. Lecture Notes in Computer Science, vol 10402, Springer, Cham
- 2 Jelle Don, Serge Fehr, Christian Majenz and Christian Schaffner, *Security of the Fiat-Shamir Transformation in the Quantum Random-Oracle Model*, Advances in Cryptology – Crypto 2019. Lecture Notes in Computer Science, vol 11693, Springer, Cham.
- 3 Jelle Don, Serge Fehr, Christian Majenz, *The Measure-and-Reprogram Technique 2.0: Multi-Round Fiat-Shamir and More*, Advances in Cryptology – Crypto 2020. Lecture Notes in Computer Science, vol 12172, Springer, Cham.
- 4 Alex B. Grilo, Kathrin Hövelmanns, Andreas Hülsing and Christian Majenz, *Tight adaptive reprogramming in the QROM*, preprint arXiv:2010.15103, accepted for publication at Asiacrypt 2021
- 5 Gorjan Alagic, Tommaso Gagliardoni and Christian Majenz, *Unforgeable quantum encryption*, Advances in Cryptology – Eurocrypt 2018. Lecture Notes in Computer Science, vol 10822. Springer, Cham.
- 6 Yfke Dulek, Alex Grilo, Stacey Jeffery, Christian Majenz and Christian Schaffner, *Secure multi-party quantum computation with a dishonest majority*, Advances in Cryptology – Eurocrypt 2020. Lecture Notes in Computer Science, vol 12107. Springer, Cham.

- 7 Gorjan Alagic, Christian Majenz, Fang Song and Alexander C. Russell, *Quantum-secure message authentication via blind unforgeability*, Advances in Cryptology – Eurocrypt 2020. Lecture Notes in Computer Science, vol 12107. Springer, Cham.
- 8 Gorjan Alagic, Christian Majenz and Alexander Russell, *Efficient simulation of random states and random unitaries*, Advances in Cryptology – Eurocrypt 2020. Lecture Notes in Computer Science, vol 12107. Springer, Cham.
- 9 Christian Majenz, Chanelle Matadah Manfouo, Maris Ozols, *Quantum-access security of the Winternitz one-time signature scheme*, accepted for publication at ITC 2021, eprint 2021/387

Peer reviewed journal articles

- 10 Rafael Chaves, Christian Majenz, and David Gross, *Information-theoretic implications of quantum causal structures*, Nature communications 6 (2015).
- 11 Matthias Christandl, Felix Leditzky, Christian Majenz, Gaeme Smith, Florian Speelmann, and Michael Walter, *Asymptotic performance of port-based teleportation*, accepted for publication in Communications in Mathematical Physics (arXiv:1809.10751)
- 12 Cécilia Lancien and Christian Majenz, *Weak approximate unitary designs and applications to quantum encryption*, Quantum 4, p. 313
- 13 Christian Majenz, Mario Berta, Frédéric Dupuis, Renato Renner, and Matthias Christandl, *Catalytic decoupling of quantum information*, Physical review letters 118, no. 8 (2017).
- 14 Berta, Mario, Fernando GSL Brandão, Christian Majenz, and Mark M. Wilde. *Conditional Decoupling of Quantum Information*. Physical review letters 121, no. 4 (2018): 040504.
- 15 Mario Berta and Christian Majenz, *Disentanglement cost of quantum states*. Physical review letters 121, no. 19 (2018)
- 16 Christian Majenz, Tameem Albash, and Daniel Lidar, *Coarse graining can beat the rotating-wave approximation in quantum Markovian master equations*, Physical Review A 88.1 (2013): 012103.
- 17 Mario Berta, Fernando G. S. L. Brandao, Christian Majenz, and Mark M. Wilde, *Deconstruction and conditional erasure of quantum correlations*, Physical Review A 98(2018): 042320

Preprints under Review

- 18 Jelle Don, Serge Fehr, Christian Majenz, Christian Schaffner, *Online-Extractability in the Quantum Random-Oracle Model*, preprint arXiv:2103.03085
- 19 Christian Majenz, Christian Schaffner, Mehrdad Tahmasbi, *Limitations on Uncloneable Encryption and Simultaneous One-Way-to-Hiding*, preprint arXiv:2103.14510
- 20 Andrea Coladangelo, Alexander Poremba and Christian Majenz, *Quantum copy-protection of compute-and-compare programs in the quantum random oracle model*, preprint arXiv:2009.13865

- 21 Jan Czajkowski, Christian Majenz, Christian Schaffner and Sebastian Zur, *Quantum lazy sampling and game-playing proofs for quantum indifferentiability*, preprint arXiv:1904.11477.
- 22 Christian Majenz, Christian Schaffner and Jeroen van Wier, *Non-malleability for quantum public-key encryption*, preprint arXiv:1905.05490.
- 23 Gorjan Alagic, Tommaso Gagliardoni and Christian Majenz, *Can you sign a quantum state?*, preprint arXiv:1811.11858.

Theses

- 24 Christian Majenz, *Entropy in Quantum Information Theory – Communication and Cryptography*, PhD thesis
- 25 Christian Majenz, *Constraints on Multipartite Quantum Entropies*, M.Sc. thesis

Meta

- 26 Yfke Dulek, Stacey Jeffery, Christian Majenz, Christian Schaffner, Florian Speelman and Ronald de Wolf, *A Guide for New Program Committee Members at Theoretical Computer Science Conferences*, (probably eternal) preprint arXiv:2105.02773