

List of Publications

Last updated: 7 November, 2022

Among these [3,6,7] are my favourite.

1 Pre-prints

- 2022 [1] **Nov. 2022** (with Jamie Sikora and Thomas Van Himbeeck). ‘Improving the security of device-independent weak coin flipping protocols’. In: Preparation. URL: <https://www.overleaf.com/read/jhwnvgbntqkd>.
- [2] **5th Jan. 2022** (with Alexandru Gheorghiu and Uttam Singh). ‘Oracle Separations of Hybrid Quantum-Classical Circuits’. In: arXiv:2201.01904. DOI: 10.48550/arXiv.2201.01904.
- [3] **12th Oct. 2022** (with Andrea Coladangelo, Matthew Coudron, Alexandru Gheorghiu, Uttam Singh and Hendrik Waldner). ‘Quantum Depth in the Random Oracle Model’. In: arXiv:2210.06454. DOI: 10.48550/arXiv.2210.06454.
- [4] **16th Mar. 2022** (with Xiao-Min Hu, Yi Xie, Ming-Zhong Ai, Kishor Bharti, Jie Zhang, Wei Wu, Ping-Xing Chen, Jin-Ming Cui, Bi-Heng Liu, Yun-Feng Huang, Chuan-Feng Li, Guang-Can Guo, Jérémie Roland, Adán Cabello and Leong-Chuan Kwek). ‘Self-Testing of a Single Quantum System: Theory and Experiment’. In: arXiv:2203.09003. DOI: 10.48550/arXiv.2203.09003.
- [5] **29th Aug. 2022** (with Jérémie Roland, Chrysoula Vlachou and Stephan Weis). ‘Solutions to Quantum Weak Coin Flipping’. In: Cryptology ePrint Archive, Paper 2022/1101. URL: <https://eprint.iacr.org/2022/1101>.

2 Proceedings

- 2021 [6] **Mar. 2021** (with Jérémie Roland and Chrysoula Vlachou). ‘Analytic Quantum Weak Coin Flipping Protocols with Arbitrarily Small Bias’. In: *Proceedings of the Thirty-Second Annual ACM-SIAM Symposium on Discrete Algorithms*. SODA ’21. USA: Society for Industrial and Applied Mathematics, pp. 919–938. ISBN: 978-1-61197-646-5.
- 2019 [7] **June 2019** (with Jérémie Roland and Stephan Weis). ‘Quantum weak coin flipping’. In: *Proceedings of the 51st Annual ACM SIGACT Symposium on Theory of Computing - STOC 2019*. ACM Press. DOI: 10.1145/3313276.3316306.

3 Articles

- 2020 [8] **July 2020** (with Kishor Bharti, Leong Chuan Kwek and Jérémie Roland). ‘Uniqueness of All Fundamental Noncontextuality Inequalities’. In: *Physical Review Research* 2.3, p. 033010. ISSN: 2643-1564. DOI: 10.1103/PhysRevResearch.2.033010. (Visited on 08/06/2022).
- 2019 [9] **Feb. 2019** (with Kishor Bharti and Arvind). ‘Revisiting the admissibility of non-contextual hidden variable models in quantum mechanics’. In: *Physics Letters A* 383.9, pp. 833–837. DOI: 10.1016/j.physleta.2018.11.049.
- 2015 [10] **Dec. 2015** (with Ali Asadian). ‘Proposal for a macroscopic test of local realism with phase-space measurements’. In: *Physical Review A* 92.6. DOI: 10.1103/physreva.92.062107.