

Curriculum Vitae of the co-PI

Name: Ravishankar Ramanathan (DoB: July 12, 1983)

Academic qualifications

- ◇ **PhD**, Physics, National University of Singapore, Singapore 01.2011–03.2013
- ◇ **M.Sc.**, Physics, National University of Singapore, Singapore 08.2006–12.2008
- ◇ **B.Eng.**, EEE, Nanyang Technological University, Singapore 07.2000–06.2004

Present position

- ◇ Assistant Professor, Department of Computer Science, The University of Hong Kong, starting 07.2019
- ◇ Senior Research Associate, Department of Computer Science, The University of Hong Kong, 03.2019–06.2019

Previous positions

- ◇ Wiener-Anspach Postdoctoral Researcher, Université Libre de Bruxelles and University of Oxford, 11.2016-09.2018
- ◇ Post-doctoral Researcher, National Quantum Information Centre of Gdańsk, University of Gdańsk, 10.2012-10.2016

Awards

- ◇ CQT PhD scholarship at the Centre for Quantum Technologies, National University of Singapore (2011).

Previous research work

The co-PI is recognized for his work in device-independent randomness amplification and the foundations of quantum mechanics. He has 32 refereed publications in these areas, including 10 papers in Physical Review Letters and 3 in Nature Communications. He has given 4 invited talks and his work on randomness amplification was recognized as a contributed talk at QIP, the premier conference in Quantum Information.

Representative publications

- ◇ **R. Ramanathan**, D. Goyeneche, S. Muhammad, P. Mironowicz, M. Grunfeld, M. Bourennane and P. Horodecki, *Steering is an essential feature of non-locality in quantum theory*, Nature Communications **9**, 4244 (2018).
- ◇ F. G. S. L. Brandao, **R. Ramanathan**, A. Grudka, K. Horodecki, M. Horodecki, P. Horodecki, T. Szarek, H. Wojewodka, *Realistic noise-tolerant randomness amplification using finite number of devices*. Nature Communications **7**, 11345 (2016).
- ◇ **R. Ramanathan**, J. Tuziemski, M. Horodecki and P. Horodecki, *No Quantum Realization of Extremal No-Signaling Boxes*, Phys. Rev. Lett. **117**, 050401 (2016).
- ◇ **R. Ramanathan** and P. Horodecki, *Necessary and Sufficient Condition for State-Independent Contextual Measurement Scenarios*, Phys. Rev. Lett. **112**, 040404 (2014).

Article Reviewer: Nature Communications, Physical Review X, Physical Review A, New Journal of Physics, Proceedings of the Royal Society A, Quantum Information and Computation, Physics Letters A, Entropy.