

Nathan Shammah

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Date of Birth: 12 April 1987 (Italian citizen)

Milan, Italy

Work

- Mar 2020 - Now **Chief Technology Officer – Unitary Fund, San Francisco, USA (remote)**
Head of the technical staff performing in-house research on quantum error mitigation (Mitiq) and open-source benchmarking platform for quantum computers (metriq.info). Oversight of the non-profit activities in the open-source quantum tech ecosystem.
- 2019 – 2022 **Visiting Scientist, Department of Physics – University of Milan “La Statale”, Italy**
- 2020 – 2022 **Visiting Scientist, TQP Lab – RIKEN Wako, Japan**
- Aug 16 - Mar 20 **Postdoctoral Research Scientist – RIKEN Wako, Japan**
Theoretical Quantum Physics Lab (Prof. Franco Nori)
My theoretical research in quantum physics lies at the boundary between cavity quantum electrodynamics and solid state physics, focusing on emergent cooperative phenomena.
- Mentored 6 research interns and PhD students on quantum optics projects.
- Author of `'make-your-code-count'` a researchers' guide to open-source their code.
- Jan 18 – Now **QuTiP – Admin**
- Developed `'qutip.piqs'` & 8 online tutorials on qutip.org, and paper.
- Organized the first QuTiP workshop, defined roadmap, governance & project maintenance.
- From Jan 2018, QuTiP downloads increased from 30k (since 2016) to over 180k in 2019.
- Jan 17 – Mar 2020 **Co-founder – Quantika quantika.co Deep tech physics consulting firm (quantum, photonics)**
- Sourced startups for largest European deep-tech venture capital firm. Technical due diligence.
- Wrote a newsletter (<https://medium.com/quantum-tech>) for 700 subscribers (50% click rate).

Awards and Funding

- 2019 – 2022 Google Summer of Code Program (Mentor)
- 2016 University of Southampton. *Vice-Chancellor's Awards (Runner-up)* for Science Outreach
- 2015 Embassy of Italy in the UK. *'Italy Made Me' Awards Certificate of Excellence in Research*
- 2013 – 2016 EPSRC UK and University of Southampton *EPSRC DTA Studentship* (PhD Funding)
- 2013 Best Poster Award *by the EPL Journal* at the Intl. School of Nanophotonics (Maratea, Italy)
- 2010 – 2012 EU Erasmus Scholarships, one at Imperial College (thesis) and one at U. of Copenhagen (1 yr)

Education

- Apr 2013 – Jul 2016 **PhD in Physics.** University of Southampton, *Southampton, United Kingdom*
Teaching assistant for Numerical Physics and Atomic Physics.
- Apr 2006 – Mar 2012 **BSc and MSc in Physics.** University of Milan, Italy (MSc grade: 110/110 *cum laude*).
Erasmus Student at Imperial College, Copenhagen University.

Scientific Publications and Presentations

A list of publications can be found on [Google Scholar](https://scholar.google.com/citations?user=NathanShammah) > 30 invited seminars at research centers, >12 poster presentations, >20 talks at conferences (Europe, Asia, USA). Invited talks at Harvard, Berkeley Lab, Stanford, Caltech, Google AI, NASA, Rigetti Computing, Northwestern University, Super.Tech, IBM.

Languages and IT Skills <https://github.com/nathanshammah>

Italian, English, French, Spanish. IT: Python, Mathematica, MATLAB, C++. Version Control: Git. Editing: LaTeX.

Service and Science Outreach

- 2019 – Now: Co-founder and vice president of the Association of Italian Researchers in Japan, airj.info.
- 2018 – Now: Referee for Sci. Rep., Opt. Lett., Phys. Lett. A, EPJ. Plus, SciPost Phys., QST, PRX Q, PRL, PRA.
- 2015 – 2016: University coordinator, Pint of Science International Festival, *Southampton, United Kingdom*