Stefano **Mangini**

QUANTUM COMPUTING RESEARCHER

Algorithmiq, University of Helsinki (Finland)

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Introduction

I am a research scientist at Algorithmiq and a postdoctoral researcher at the University of Helsinki, working on quantum information and computation. I earned my Ph.D. in Theoretical Physics from the University of Pavia, focusing on variational quantum algorithms, and hold a Master's and Bachelor's degree in Physics from the University of Trieste

My research focuses on quantum computing, tensor networks, and machine learning.

General

Nationality	Italian
Current address	Helsinki, Finland
Language	English, Italian
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Experience

Algorithmiq · *Helsinki, Finland*
RESEARCHER · *Apr. 2023 - ongoing*
Developing quantum algorithms and tensor network methods for quantum computing.

University of Helsinki · *Helsinki, Finland*
POSTDOCTORAL RESEARCHER · *Apr. 2023 - ongoing*
PostDoc in the HelTeq group, working on quantum computing.

Quantinuum · *London, United Kingdom*
QUANTUM MACHINE LEARNING INTERN · *Apr. 2022 - Aug. 2022*
Research Internship position in the Quantum Machine Learning team at Quantinuum.

Education

University of Pavia · *Pavia, Italy*
PH.D. IN THEORETICAL PHYSICS · *Nov. 2019 - Apr. 2023*
- Research on quantum computation and quantum machine learning with variational algorithms.
- Thesis: *Variational quantum algorithms for machine learning: theory and applications*.   Supervisor: Prof. Chiara Macchiavello

University of Trieste · *Trieste, Italy*
MSc IN THEORETICAL PHYSICS · *Oct. 2017 - Oct. 2019*
- Final Grade: 110/110 cum laude.
- Thesis: *Continuous Quantum Neuron*.   Supervisors: Prof. Fabio Benatti, Prof. Stefano Mancini

University of Trieste · *Trieste, Italy*
BSc IN PHYSICS · *Oct. 2014 - Jul. 2017*
- Final Grade: 110/110 cum laude.
- Thesis: *The Ehrenfest model and the dynamics of neutral mutations in evolutionary genetics*.   Supervisor: Prof. Edoardo Milotti

Publications

Full list available on Google Scholar and arXiv.   *🎓Google Scholar*
✉arXiv

Teaching

University of Helsinki · *Helsinki, Finland*
SEMINARS · *2024*
Seminar on recent advancements in quantum computing, including hands-on programming sessions.

University of Pavia   *Pavia, Italy*
Teaching assistant   *Nov. 2019 - Apr. 2023*

Teaching assistant of Prof. Chiara Macchiavello for the course "Physics 1" in the BSc in Biology. Assistant of Prof. Lorenzo Maccone for the course "General Physics 2" in the BSc in Mathematics.

Extracurricular Activity

BeQuantum: the italian community on quantum technologies   *Online community*
Co-founder   *Nov. 2022 - Ongoing*

Co-founded BeQuantum, an Italian community for Quantum Technologies, connecting students, researchers, institutions, and companies. We organize both online and in-person events while promoting public awareness of quantum technologies through scientific outreach on social media

Science outreach
Speaker & Event Organizer

I am passionate about science outreach and have actively participated in and helped organize numerous events in various locations over the years.

Extracurricular Activity