

Tobias C. Sutter, BSc MSc

Birth: July 14, 1995

Address: Fechtergasse 16/17, 1090 Vienna

☎ +43 664 3464618

✉ tobias.sutter@quantagon.at 🌐 www.quantagon.at



Education

2023 - present **PhD programme Physics**
University of Vienna

2018 - 2021 **Master's programme Physics**
University of Vienna

Master's Thesis: "Study of Global Vortical Null Geodesics in Kerr Spacetime"
supervised by Piotr T. Chruściel/Maciej Maliborski. Grade Average: 1.08

2015 - 2018 **Bachelor's programme Astronomy**
University of Vienna

Bachelor's Thesis: "Statistical Significance of the Bimodality in Chromospheric Activity"
supervised by Sudeshna Boro Saikia. Grade average: 1.56

Skills

Languages

- German (C3/mother tongue)
- English (C2)
- Spanish (B2)

Programming skills

Python, Julia, Wolfram Mathematica, LaTeX, Git, WordPress

Awards and Honors

- Merit-based scholarship for the academic year 2019/2020
- Merit-based scholarship for the academic year 2018/2019
- Merit-based scholarship for the academic year 2017/2018

Publications

- **T.C.S.**, Christopher Popp, Beatrix C. Hiesmayr. *The Impact of Architecture and Cost Function on Dissipative Quantum Neural Networks*. Preprint: arXiv:2502.09526 (2025)
- Christopher Popp, **T.C.S.**, Beatrix C. Hiesmayr. *Low-Fidelity Entanglement Distillation with FIMAX*. Preprint: arXiv:2502.09261 (2025)
- Christopher Popp, **T.C.S.**, Beatrix C. Hiesmayr. *A Novel Stabilizer-based Entanglement Distillation Protocol for Qudits*. Preprint: arXiv:2408.02383 (2024)
- Beatrix C. Hiesmayr, Christopher Popp, **T.C.S.** *Bipartite Bound Entanglement*. Preprint: arXiv:2406.13491 (2024)

Conferences (Talks and Posters)

- Invited Talk on "Dissipative Quantum Neural Networks: current status and next steps" at SQEML (online seminar, TU Munich) on November 27, 2024

- Poster on “Dissipative Quantum Neural Networks” at VQF Conference 2024 (Vienna) from September 23-27, 2024
- Invited talk on “Quantum Neural Networks and the Heisenberg Uncertainty Relation” at IQSA24 (Brussels) from July 22-26, 2024
- Talk on “Quantum Neural Networks: current status and next steps” at WMLQ 2024 (Warsaw) from June 4-7, 2024
- Talk on “Study of Vortical Null Geodesics in Kerr spacetime” at the CERS11-meeting (online) from February 11-13, 2021

Others

- Participation in Vienna Quantum Foundations Conference 2021 from September 7-10, 2021
- Certificate of “Quantum Excellence” of Qiskit Global Summer School 2021 on “Quantum Machine Learning” from July 12-23, 2021
- Completion of the IBM Quantum workshop "Quantum Fridays" from March 12-July 16, 2021
- Certified attendance of CoQuS Summer School 2020 on “Gravitational Quantum Physics” from September 3-6, 2020
- Participation in CERS10-meeting (Potsdam-Golm) from February 20-22, 2020
- IAU general assembly volunteer in Vienna from August 20-31, 2018