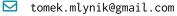
Tomasz Partryk Młynik

Born in 1992, living in Gdańsk



1 +48 730-258-844



@Github_T.Mlynik



https://orcid.org/0000-0003-4182-907X



Education

2019 – till now | Ph.D., Physics Science, University of Gdansk

Thesis title: Odwzorowania k-dodatnie w Fizyce (eng. k-positive maps in physics).

2015 – 2019 M.Sc. Physics Science, University of Gdansk

Thesis title: Nierozkładalne odwzorowania k-dodatnie na algebrach macierzowych (eng. k-positive indecomposable maps on matrix algebras).

2012 – 2015 **B.A. Physics Science, University of Gdansk**

Thesis title: Badanie krzywej rotacji galaktyki (eng. Study of the galaxy's rotation curve).

Employment History

2016 - 2018 Assistant - Translation Agency

2015 - 2016 | Instructor - Roboty i Spółka

2013 - 2015 Chef - **North Fish**

2012 - 2013 Customer Consultant - **Gabor** (Fashion store)

Selected Presentations & Invited Talks

Sep 2023 Invited talk in Tokyo University, Japan PBT with k copies of the input state.

Aug 2023 **23rd Asian Quantum Information Science Conference in Seoul, Korea** Transformation of an unknown unitary operation: complex conjugation.

Nov 2022 Quantum Fundaments and Quantum Information Theory seminar in Kyoto, Japan Construction and characterization of 1-parameter (non)decomposable maps.

Research Publications

Journal Articles

- D. Ebler, M. Horodecki, M. Marciniak, T. Młynik, M. T. Quintino, and M. Studziński, "Optimal universal quantum circuits for unitary complex conjugation," *IEEE Transactions on Information Theory*, vol. 69, no. 8, pp. 5069–5082, Aug. 2023, ISSN: 1557-9654. *Opicion Document Description (No. 1888)* DOI: 10.1109/tit.2023.3263771.
- P. Gnaciński and T. Młynik, "Keplerian rotation of our galaxy?" *Publications of the Astronomical Society of the Pacific*, vol. 129, no. 974, p. 044 101, Feb. 2017. ODOI: 10.1088/1538-3873/aa5c9b.

Pre-published

T. Młynik, H. Osaka, and M. Marciniak, Characterization of k-positive maps, 2024. arXiv: 2104.14058 [quant-ph]. & URL: https://arxiv.org/abs/2104.14058.

Skills

Languages Polish (native), English (reading, writing, and speaking B2+).

Coding Python, MATLAB, Wolfram Mathematica, Language Python, Mathematica, Langua

Databases Linear algebra, functional analysis, data analysis.

Misc. Academic research, teaching, training, consultation, LTFX typesetting, and publishing.

Miscellaneous Experience

Projects and Grands

2021-2024 Sonata 16 - PhD student position, Symmetries and Entanglement in Quantum Circuits.

Certification

English Language Certification. Awarded by the University of Gdańsk.

References

Available on Request