

Personal Information

Date of Birth: 15 July 1999
Email: polinaokofman@gmail.com
Address: Avenida Rovisco Pais 1, Lisbon 1049-001, Portugal

Education

- 2023–present **Ph.D (Physics)**: B. Verkin Institute for Low Temperature Physics and Engineering of the National Academy of Sciences of Ukraine
- 2021–2023 **Master of Science (Physics)**: V. N. Karazin Kharkiv National University, Ukraine.
GPA: 97.93/100
- 2017–2021 **Bachelor of Science (Physics)**: V. N. Karazin Kharkiv National University, Ukraine.
GPA: 96.05/100

Areas of Interest

Quantum mechanics, Quantum computing, Quantum cryptography.

Publications and Theses

1. O. Ivashtenko, P. Kofman, O. Golubov, and Z. Maizelis, “Origami launcher”, *Emergent Scientist* **3**, 5 (2019) [<https://doi.org/10.1051/emsci/2019004>].
2. Bachelor thesis “Majorana transitions with linear perturbation” (2021) [B. Verkin Institute for Low Temperature Physics and Engineering (ILTPE), National Academy of Sciences of Ukraine, supervisor: Prof. S. N. Shevchenko].
3. P. O. Kofman, O. V. Ivakhnenko, S. N. Shevchenko, and F. Nori, “Majorana’s approach to nonadiabatic transitions validates the adiabatic-impulse approximation”, [<https://doi.org/10.1038/s41598-023-31084-y>].
4. Master thesis “Phase control: nonadiabatic dynamics of qubits” [B. Verkin Institute for Low Temperature Physics and Engineering (ILTPE), National Academy of Sciences of Ukraine, supervisor: Prof. S. N. Shevchenko].
5. Polina Kofman, Sergey Shevchenko, Franco Nori, “Tuning the initial phase to control the final state of a driven qubit: single-passage coherent destruction of tunneling”, [arXiv:2308.03571]

Conferences

1. International Conference of Students and Young Scientists in Theoretical and Experimental Physics “HEUREKA-2018”, May 2018, Lviv, Ukraine [*oral presentation, Special Prize for the best presentation*].

2. International Conference of Students and Young Scientists in Theoretical and Experimental Physics “HEUREKA-2019”, May 2019, Lviv, Ukraine [*oral presentation, Special Prize for the best presentation*].
3. The Second International Advanced Study Conference “Condensed matter & low-temperature physics 2021”, June 2021, Kharkiv, Ukraine [*poster*].
4. The APS March Meeting 2022, March 2022, Chicago, USA (online) [*poster*].
5. The RIKEN-CPR Physics Workshop for Students, December 2022, Wako-shi, Japan [*oral presentation*].
6. 26th RQC seminar (RIKEN Center for Quantum Computing) December 2022, Wako-shi, Japan [*oral presentation*].
7. The APS March Meeting 2023, March 2023, Las Vegas, USA (online) [*oral presentation*].
8. Condensed matter & low-temperature physics, June 2023, Kharkiv, Ukraine(online) [*oral presentation*].

Fellowships and Grants

1. Scholarship of the President of Ukraine, 3 semesters in 2020–2021.
2. The Army Research Office (ARO) grant “Driven quantum systems: Landau-Zener-Stuckelberg-Majorana physics”, 2020–2023 [*Member*].
3. International Program Associate at RIKEN, Japan, 2022–2023.
4. Visiting student at Instituto de telecomunicacoes, Instituto Superior Tecnico, Lisbon, Portugal, 2023-present.

Awards and Honors

1. Karazin University Programming Cup, November 2017, Kharkiv, Ukraine, *the Second Team Prize*.
2. The 16th Ukrainian Physicists' Tournament for University students, December 2017, Kyiv, Ukraine, *the Second Team Prize*.
3. The 17th Ukrainian Physicists' Tournament for University students, December 2018, Kyiv, Ukraine, *the Third Team Prize*.
4. The 18th Ukrainian Physicists' Tournament for University students, December 2019, Kyiv, Ukraine, *the First Team Prize*.
5. The International Physicist Tournament, May 2020, online, *the Second Team Prize*.
6. The International Physicist Tournament, May 2021, online, *the Third Team Prize*.
7. Competition of scientific papers dedicated to the 110th anniversary of A. I. Akhiezer, 2021, Kharkiv, Ukraine, *the Second Prize*.

Other Scientific Activities

1. Jury Member of the All-Ukrainian Junior Young Physicists' tournaments, in 2017, 2018, 2019, 2020.
2. Jury Member of the Kharkiv Region Physics Olympiad, 2020.
3. Lecturer and Organizer at the Summer School in Mathematics at the V. N. Karazin Kharkiv National University, in 2018 and 2019.

Technical Skills

Python (Basic knowledge), C++ (Basic knowledge)

Wolfram Mathematica, MatLab

Origin Pro, LaTeX, AutoCAD