Lara Ulčakar

Physicist

Nationality::

Slovenian

Contact

Email:
lara.ulcakar@gmail.com

Webpage:
http://www-f1.ijs.si/~lara/

Languages

Slovenian
Native proficiency
English
Full professional proficiency
German
Limited working proficiency
Russian
Limited proficiency

Work Experience

Quantum optics: Faculty of Mathematics and Physics
3/2023 - present

- Work in quantum optics lab: sources of entanglement
- Theoretical work on quantum memories
- Leading the team in the absence of the lead
- Workpackage leader in EuroQCI project SiQUID: establishing first QKD network in Slovenia
- Quantum tech project with the Ministry of Defense

Data engineer: BE-terna
12/2020 - 1/2023

- Development of large-scale data architectures
- Analyzing and visualizing large data sets
- Working with clients

Early stage researcher: Jožef Stefan Institute
Student work: 8/2014 - 8/2016, PhD: 10/2016 - 11/2020, Research associate: 1/2022 - present

- Theoretical work on quantum computing, topological insulators and electric properties of nanojunctions
- Numerical simulations
- Analytical derivations
- Data representation, writing scientific papers

Teaching assistant: Faculty of Mathematics and Physics
2/2017 - present

- Exercises from Classical mechanics, 50 students
- Exercises in Nanophysics, 10 students
- Organization of exams

Education

PhD in Physics: Faculty of Mathematics and Physics - Ljubljana, *10/2016 - 11/2020*

MSc in Physics: Faculty of Mathematics and Physics - Ljubljana, *10/2014 - 9/2016*

BSc in Physics: Faculty of Mathematics and Physics - Ljubljana, *10/2011 - 9/2014*

Skill highlights

- Quantum optics and communication
- Condensed matter physics
- Quantum computing
- Quantum memories based on cold atoms
- Python and C
- SQL and Qlik
- Mathematical and statistical data modelling

- Preparing research grant proposals
- Pedagogy
- Teamwork, people management, project leading
- LaTeX

Awards

- L’Oreal-UNESCO award for women in science
- Slovenian name of the month (Val 202)
- Prešeren prize for outstanding master's thesis

Interests

- Physics
- Mountaineering
- Languages
- Books, film, and music
- Travelling and networking