



YURY HOLUBEU

Physicist

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yury-holubeu YuriHolubeu

Ljubljana, Slovenia

STRENGTHS

Goal oriented

Critical thinking

Analytical skills

Creativity

Presentation skills

Research skills

Communication skills

FOCUS AREAS

Field theory

Superconductivity

LANGUAGES

English: **C1, IELTS 7.0 (2022)**

Russian: **Native**

Belarusian: **Good**

EDUCATION

PhD | Jožef Stefan Institute

October 2025 – now

Ljubljana, Slovenia

- Research in charge density waves, polarons, properties of TaS_2 material.

Master's Degree | KU Leuven

~ November 2022 – January 2025

Leuven, Belgium

- I finished approximately 20 subjects in theoretical physics.
- The delay in obtaining Belgian visa lead to delay of start of studies.
- From October 2022 to December 2022 I worked as a general tutor in physics and mathematics, helped students with preparation for Bachelor's exams. From January 2022 until June 2023 I worked as a tutor in classical field theory.
- Finished with "Cum laude" (with distinction)

Master's Degree | Moscow Institute of Physics and Technology (MIPT)

September 2021 – April 2022

Moscow, Russia

- I continued to study in Department of General and Applied Physics
- Focused on quantum information and gravitational wave detection
- Left because of obvious reasons

Bachelor's Degree | Moscow Institute of Physics and Technology (MIPT)

September 2016 – June 2021

Moscow, Russia

- I studied in Department of General and Applied Physics
- GPA: 3,35
- First half of my Bachelor's I spend on subdepartment of string theory, and second on subdepartment of JINR
- Studied a broad range of disciplines in physics, math and programming, especially theoretical physics
- Graduation Project "Gravitational Lensing in Binary Systems"

High School | Secondary School №54

September 2014 – May 2016

Minsk, Belarus

- Participated in Physics Olympiads at the national level, finished with excellent marks.


MAIN RESEARCH PROJECTS IN PHYSICS

Multiterminal Josephson Junctions (Master's thesis)

September 2023 – November 2023


- A research in condensed matter and superconductivity. I used special analytical methods for models with tight-binding models and liner algebra.
- The thesis is available [here](#).

Waveguide QED

 October 2024 – January 2025

- A research in quantum optics using methods of quantum field theory.
- Analyzed real-time dynamics of photons and their interaction with qubits, learned better QFT and quantum optics.

Gravitational Lensing in Binary Systems (Bachelor's project)


 October 2020 – June 2021

- Analyzed lensing of binary systems, use computational methods to obtain their lensing properties.
- Studied Pickard-Lefschetz theory, wave optics, wolfram, computer modeling.
- The thesis is available [here](#)

WORKING EXPERIENCE


Researcher | University of Ljubljana

 February 2025 – October 2025

 Ljubljana, Slovenia

- Research on superconductors with dissipation

Junior Researcher | Company "Terra Quantum"

 July 2021 – April 2022

 Moscow, Russia

- Studied gravitational waves and their detection and electrodynamics in a curved space-time
- Researched a possibility of gravitational wave detection in waveguide

MOST PROUD OF



Passed the Landau Theoretical Minimum Exam

Solved three hard problems on electrodynamics and general relativity on the exam of the field theory. Regularly I prepare myself for the rest of the exams.



Organised notes

Developed a system of organising notes of studied material and research findings in \LaTeX files. Many of them are from 1000 to 3000 pages.



Do sports and lead a healthy lifestyle

Daily workout, weight control, healthy diet. In 2021 practiced martial arts (sambo), in 2025 - Krav Maga.

LEARNED DISCIPLINES

Theoretical physics:

Classical Mechanics

Field Theory

General Relativity

Quantum Mechanics

Quantum Field Theory

Statistical Physics

Condensed Matter Physics

Thermodynamics

Physical Kinetics

Classical Electrodynamics

Optics

Quantum Information Theory

Gravitational lensing

Cosmology

Mathematics:

Mathematical Analysis

Complex Analysis

Differential Equations

PDE-s

Linear algebra

Differential Geometry

Probability Theory

Computational mathematics

Programming:

Latex

Git

Wolfram

C/C++

Python