YURY HOLUBEU

Physicist

yuriholubeu.github.io [under construction]
yuri.holubev@gmail.com +32 465 62 92 76 Ljubljana, Slovenia
yury-holubeu YuriHolubeu

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.

EDUCATION

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 not to support russian war

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 2000 pages.

Do sports and lead a healthy lifestyle
Daily workout, weight control, healthy diet. In 2021 practiced martial arts (sambo).

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