YURY HOLUBEU

Junior physicist

yuri.holubev@gmail.com | +32 465 62 92 76 | Leuven, Belgium
yury.holubeu@student.kuleuven.be | yury-holubeu | YuriHolubeu

STRENGTHS

Goal oriented | Critical thinking | Analytical skills | Creativity | Time management | Presentation skills | Research skills | Business communication skills

FOCUS AREAS

Field theory | Superconductivity

LEARNING NOW

Advanced classical field theory | Quantum field theory | Quantum mechanics | Classical mechanics

LANGUAGES

English: C1, IELTS 7.0 (2022)

Russian: Native

Belarusian: Approximately native

EDUCATION

Master's Degree | KU Leuven

∼ Nov 2022 – (planned) January 2025 | Leuven, Belgium

- Finished approximately 20 subjects, most of them are in theoretical physics (by August 2024).
- I started studying unofficially in November 2022, but because of a delay in my visa, the official beginning of my studies was in February.
- From October 2022 to December 2022 meanwhile I worked as a general tutor in physics and mathematics, helped students with preparation for exams (for example, in quantum mechanics, kinetics, complex analysis, optics, etc.)
- From January 2022 until June 2023 I worked as a tutor in classical field theory.

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

September 2021 – April 2022 | Moscow, Russia

- Department of General and Applied Physics
- Studied mostly 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

- Department of General and Applied Physics
- GPA: 3,35
- Kafedra of string theory → Kafedra 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.

RESEARCH PROJECTS IN PHYSICS

Gravitational Wave Detection

July 2021 – April 2022

- Studied electrodynamics in a curved space-time and properties of gravitational waves (GW).
- Analyzed electromagnetic wave equations in waveguide in presence of GW.

Gravitational Lensing in Binary Systems

October 2020 – June 2021

- Graduation project
- Analyzed lensing of binary systems, use computational methods to obtain their lensing properties.
- Studied Pickard-Lefschetz theory, wave optics, wolfram, computer modeling.

EXPERIENCE

Junior Researcher | Quantum technology 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