



# YURY HOLUBEU

Junior physicist

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in 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 a range of quantum mechanics subjects
- 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.

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## 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 modelling.

## EXPERIENCE

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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

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### 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

My research and studied material are structured and organised in  $\text{\LaTeX}$  files and ready for further research. Many of them are around 1000 pages.



### Do sports and leave a healthy lifestyle

I do some sport nearly everyday and keep track of my weight. In 2021 practiced marcial arts (sambo).

## LEARNED DISCIPLINES

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### 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