

## Education

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### University of Cambridge (Gonville & Caius College)

**10.2019 – 06.2023**

*MSci in Natural Sciences*

*Class I (87%)*

Dissertation:

Black holes in a new relativistic theory for modified Newtonian dynamics  
Supervised by [Dr Will Barker](#) and [Dr Amel Durakovic](#)

MSci coursework:

Major topics: • Relativistic astrophysics and cosmology • Biological physics • Geophysics  
Minor topics: • Advanced statistical mechanics • Exoplanets • Formation of structure in the Universe • General physics paper

*BA in Natural Sciences*

*Class II.1 (65% avg.)*

BA coursework:

Physics, Mathematics, Materials Science, Earth Sciences

### Acad. Nikola Obreshkov High School, Burgas

**09.2011 – 06.2019**

*High School Diploma*

*Grade 5.99/6.00*

Main modules:

Mathematics, Natural Sciences, English, Russian

## Work Experience

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### Sofia Mathematics High School

**10.2023 – 07.2025**

Physics teacher to about 200 students, aged 13 to 19, in Bulgaria's most prestigious high school. Apart from regular classes, I led extracurriculars where I provided training for physics competitions and advised on university admissions.

## Personal Skills

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Languages:

English (proficient), Russian (conversational), Bulgarian (native)

Computing:

git, bash, Mathematica,  $\LaTeX$ , Asymptote

Programming:

C++, Python

## Outreach

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### High School Competitions

**05.2019 –**

I've served as a jury member for the Bulgarian Astronomy Olympiad. In this capacity I've done lots of problem writing and editing (e.g. [1], [2]), and I've led classes at the annual training camps.

In 2025 I served as Leader for the Bulgarian team at [IOAA](#), contributing to its best-ever performance (3 gold, 1 silver).

From 2019 until 2023, I managed [Burgas Challenge](#), which at one point was the largest online Maths & Physics competition in Bulgaria.

I occasionally contribute problems for international-level competitions as well (e.g. [3]).

### Invited Talks

**01.2020 –**

Popular science at regional forums. I have lectured on charge-coupled devices, photometry, the history of astronomy, getting a degree in physics, and the scientific method.

### Physics Handouts

**09.2023 –**

I've published hundreds of pages' worth of physics resources for free, directed towards talented high-schoolers. Hosted at <https://stefanivanov.site/teaching>.

I wrote difficult problems in physics and astronomy to be used in a cutting-edge [AI benchmark \(2501.14249\)](#). I was awarded prize money for question quality and novelty.

Selected Awards

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Nevill Mott prize for best theoretical physics project, University of Cambridge	2023
Senior scholarship, Gonville & Caius College	2021
Silver medal, International Geography Olympiad	2019
Gold medal, International Olympiad on Astronomy and Astrophysics	2017, 2018
Silver medal, European Physics Olympiad	2018
Gold medal (Absolute winner), International Astronomy Olympiad	2015