

# Thibeau Wouters

## curriculum vitae

|                                     | Education  |  |  |
|-------------------------------------|--|--|--|
| 2022 – now                          | Master of Artificial Intelligence, KU Leuven.  |  |  |
| 2020 – 2022                         | Master of Theoretical Physics (minor: nuclear physics), KU Leuven, 91.419 summa cum laude with congratulations of the Board of Examiners.      |  |  |
| 2017-2020                           | Bachelor of Physics, KU Leuven, 74.42% cum laude.  |  |  |
| 2017-2020                           | Bachelor of Mathematics, KU Leuven, 73.92% cum laude.  |  |  |
| 2011–2017                           | –2017 Latin-mathematics, Sint-Ursula-Insituut, OLV Waver.  |  |  |
|                                     | Projects & theses  |  |  |
| title<br>supervisor                 | Holographic RG flows in gauged supergravity Nikolay Bobev  |  |  |
| •                                   | Physics master thesis studying the applications of AdS/CFT in gauged supergravity theories. (PDF) (presentation)                               |  |  |
| title                               | Supersymmetric black holes and the black hole attractor mechanism  |  |  |
| supervisor                          | Antoine Van Proeyen  |  |  |
| summary                             | Exam report on supersymmetric black holes and black hole attractors as solutions to supergravity theories. (PDF) (presentation)                |  |  |
| title                               | Spatiotemporal coordination of the cell divison cycle  |  |  |
| supervisors                         | Lendert Gelens, Daniel Ruiz Reynés   |  |  |
| summary                             | Research internship investigating wave phenomena in cell cycle oscillations via simulations and dynamical systems theory. (PDF) (presentation) |  |  |
| title                               | On Quantum Harmonic Oscillators, Modularity and Algebraic Number Theory  |  |  |
| supervisor                          | Valentin Reys  |  |  |
| summary                             | Physics bachelor thesis. (PDF)   |  |  |
|                                     | On Algebraic Geometry and the 27 Lines on Smooth Cubic Surfaces in ${\Bbb C}P^3$ Feng Hao  |  |  |
| ·                                   | Mathematics bachelor thesis. (PDF)   |  |  |
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### Experience

#### Vocational

2022 – now **Tutor**, Spring-stof (URL).

Tutoring group sessions of cognitively strong children and teenagers (age 5 - 18) with tailor-made education, and developing original course material.

2021 – now **Tutor**, *Slaagsleutels (URL)*.

Tutoring one-on-one lessons, from high school to university students, and preparing students for the entry exams of medicine and dentistry.

2020 – 2022 Teaching Assistant and Student Developer, KU Leuven (URL).

Revising and expanding the *General Physics III* course material, including recording screencasts (2020). Expanding the mathematics (2020) and chemistry (2022) summer school material for new bachelor students in an online LaTeX-environment. Teaching exercise classes to first year bachelor students for the courses *General Physics I* and *Mathematical proofs and reasoning* (2020) and *Biophysics* (2021). Assisting the mathematics and physics exercise sessions of the summer school (2022).

2019 - now **Tutor**, Studant (URL).

Tutoring one-on-one physics and mathematics lessons of various levels, from high school to university students.

2015 – 2019 **Student employee**, *Delhaize*, Keerbergen.

All-round employee, including cashier and centre store.

#### Miscellaneous

- 2021 Completed teaching assistant training, KU Leuven.
- 2020 **Peer Assisted Learning tutor**, *KU Leuven*.

PAL tutor for the Quantum Mechanics physics course.

2019 – 2020 **Volunteer**, Pangaea & Home Vesalius.

Welcoming new students and organizing events in international student residence.

## Languages & Computer skills

| Dutch   | ••••      | <b>M</b> TEX | • • • • 0 |
|---------|-----------|--------------|-----------|
| English | • • • • • | Python       | • • • • 0 |
| French  | • • 0 0 0 | Matlab       | • • 0 0 0 |

#### Awards

- o KU Leuven Physics prize 2022: highest grade among physics master students.
- o 2<sup>nd</sup> place Flemish Astronomy Olympiad 2017 (see article).
- o 1st place Flemish Astronomy Olympiad 2016 (see article).