

David Barth

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Education

- 10/2025 – 06/2026 **University of Cambridge**
Part III Mathematical Tripos
- 10/2021 – 04/2025 **University of Heidelberg**
Physics/Mathematics B. Sc.
- 08/2023 – 06/2024 **Norwegian University of Science and Technology Trondheim**
Physics
Exchange year with the Erasmus program

Research Experience

- 06/2025 – 09/2025 **RISE Worldwide (DAAD)**
Harvard University
Advisor: Miaki Ishii
Detection of thunderstorms from meteorological data
- 10/2024 – 04/2025 **Undergraduate Research**
University of Heidelberg
Advisor: Matthias Bartelmann
Thesis: "The Matter Power Spectrum on Small Scales: An Approach to the Asymptotics of Dark Matter within Kinetic Field Theory"
- 06/2024 – 09/2024 **MITACS Globalink**
University of Lethbridge, Canada
Advisor: Arundhati Dasgupta
Loop Quantum Gravity and calculation of Maxwell's Equations under the influence of a gravitational wave in its coherent state

Teaching Experience

- 10/2024 – 04/2025 **Teaching Assistant**
University of Heidelberg
PMP3 - Higher Mathematics III (Prof. Razvan Gurau)
- 10/2022 – 03/2023 **Teaching Assistant**
University of Heidelberg
MA4 - Linear Algebra I (Prof. Gebhard Böckle)
- 11/2016 – 07/2019 **Tutoring**
Mathematics, Physics and Latin for high school students

Honors and Awards

- 12/2023 - current **German Academic Scholarship Foundation**
Prestigious academic scholarship
- 06/2025 – 08/2025 **RISE Worldwide Fellowship (DAAD)**
Funding my research internship at Harvard University
- 06/2024 – 09/2024 **MITACS Globalink Research Award**
Funding my research internship in Lethbridge, Canada
- 10/2022 – 12/2023 **Deutschlandstipendium**
Governmental academic scholarship