Paula Heim

paula.heim@maths.ox.ac.uk
paula.heim@mis.mpg.de
https://paula.heim-rettner.de/

Education

2024-X — Ph.D. studies, University of Oxford and Max Planck Institute for Mathematics in the Sciences, supervised by Cornelia Druțu and Anna Wienhard.

2023/24 — Master of Science in Mathematical & Theoretical Physics, with distinction, University of Oxford.

2022/23 — Bachelor of Science in Mathematics, Heidelberg University.

2019-23 — Bachelor of Science in Physics, Heidelberg University.

Research Experience

10/23-11/24 — Extension of my summer project on quantum simulation with ultracold Rydberg atoms with Jacek Dobrzyniecki and Michał Tomza, preprint available here.

05/2024 — Dissertation on *"Quasiisometric Rigidity in Rank-One Symmetric Spaces à la Pansu"*, supervised by Cornelia Druțu, available here.

07-09/2023 — Research Internship on *"Quantum Simulator with Circular Rydberg Atoms"* at the University of Warsaw under the supervision of Michał Tomza, report available here.

09/2023 — Bachelor's Thesis in Mathematics on *"The Visual Boundaries of Hyperbolic Spaces"*, supervised by Beatrice Pozzetti and Max Riestenberg, available here.

07/2023 — Bachelor's Thesis in Physics on *"Lee-Yang Theorem à la Lieb-Sokal"*, supervised by Manfred Salmhofer, available here.

Teaching Experience

MT 2024	Teaching Assistant for Topology and Groups (University of Oxford)
Summer 2023	Tutor for Differential Geometry (Heidelberg University)
Summer 2022	Tutor for Theoretical Physics (Heidelberg University)
Winter 2020/22	Tutor for Linear Algebra I (Heidelberg University)
Summer 2021	Tutor for Linear Algebra II (Heidelberg University)
Winter 2020/21	Tutor for Linear Algebra I (Heidelberg University)

Languages and Hobbies

Languages: German, English, French, Polish, Latin

Hobbies: Playing the piano, running, cycling and hiking in the mountains, philosophy.