

Zihong Lin

Curriculum Vitae

✉ zhlin@uw.edu

EDUCATION

- 2024 – present **Ph.D. in Mathematics**, *University of Washington, Seattle*
- 2023 – 2024 **MASt Pure Mathematics (Part III, Mathematical Tripos)**, *Jesus College, University of Cambridge*
Distinction, Top 10%.
Dissertation: On the Geometry and Combinatorics of G -modules.
- 2019 – 2023* **BA in Mathematics**, *St Hugh's College, University of Oxford*
First Class.

AWARDS

- 2024 **College Mathematics Prize**, *Jesus College, University of Cambridge, £120*
For top performance in Part III.
- 2024 **College Scholar**, *Jesus College, University of Cambridge, £120*
Elected for outstanding performance.
- 2020–2023 **College Scholar**, *St Hugh's College, University of Oxford, £200/year*
Elected for outstanding performance.
- 2021 **EPSRC Vacation Internship Bursary**, *£3,200.*

CONFERENCES & SEMINARS

- Sep 2025 – present **Interactions between algebraic and convex geometry**, *University of Washington*
Organiser and speaker for student reading seminar.
- Jul 2025 **Summer Research Institute in Algebraic Geometry**, *Fort Collins, CO*
- Apr 2025 **Western Algebraic Geometry Symposium**, *Vancouver, BC*
- Mar 2024 **Tropical Mathematics and its Applications**, *Durham University, UK*
- Jun 2023 **Queer and Trans Mathematicians in Combinatorics**, *Queen Mary University of London, UK*
- Nov 2022 **EPSRC Summer Research Poster Session**, *Oxford, UK*
Presented poster on formality weights to STEM undergraduates.

TEACHING AND SERVICES

Gap year in China during 2021–2022.

- Sep 2025 – **Graduate Mentor**, *University of Washington*
 present Supervised undergraduate directed reading on projective geometry and algebraic curves.
- Sep 2024 – **Teaching Assistant**, *University of Washington*
 present MATH 125 (Calculus II), MATH 126 (Calculus III), MATH 402 (Modern Algebra).
- Jan – Mar 2025 **Graduate Mentor**, *UW Math AI Lab*
 Co-mentored four undergraduates developing automated theorem provers using LLMs and Lean; achieved 30% accuracy on the `minif2f` benchmark.
- Mar – May **Mentor**, *The Oxbridge Launchpad*
 2023 Guided state-school students in preparation for the Oxford Mathematics Admissions Test.
- 2021, 2023 **Private Tutor**
 Taught tutorials for third-year Number Theory, Axiomatic Set Theory; and first-year Analysis.
- 2018 **Junior Counsellor**, *Ross Mathematics Program*
 Guided students by grading problems, leading tutorials, and organising activities.

UNDERGRADUATE PROJECTS

- Jul – Sep 2023 **Schubert Varieties and K -Theory**, *Queen Mary University of London*, Supervisor: Prof. Alex Fink
 Explored relations between K - and Chow-classes of Schubert varieties via recent literature and computations in Sage.
- Jul – Sep 2022 **Formality Relations in Deformation Quantisation**, *University of Oxford*, Supervisor: Dr. Erik Panzer
 Developed computational tools for formality weights in Kontsevich's quantisation; identified minor new combinatorial relations.

OTHER INFORMATION

- Skills Mathematica; Sage; Python; C++; \LaTeX ; Linux.
- Languages English (bilingual); Chinese (native); Cantonese; Teochew; Japanese; British Sign Language.
- Interests Squash; Hiking; Tai Chi; Geoguessr; Coffee-making.