

# HAOYANG HE

[haoyangh@mun.ca](mailto:haoyangh@mun.ca) | [Webpage](#)

Department of Mathematics and Statistics, Memorial University of Newfoundland, St. John's, NL, Canada

## EDUCATION

- **Memorial University of Newfoundland** 2024–present  
*Doctor of Philosophy in Mathematics* St. John's, NL, Canada
  - Supervisor: Prof. Eduardo Martínez-Pedroza
  - Research interests: geometric group theory, low-dimensional topology
- **University of Warwick** 2023–24  
*Master of Advanced Study in Mathematical Sciences (MASt)* Coventry, England
  - MASt research project: Surface homeomorphisms without fixed points, supervised by Dr. Saul Schleimer
- **University of Manchester** 2019–23  
*Master of Mathematics with Honours (MMath (Hons))* Manchester, England
  - MMath project: Topology and algebra of finite graphs, supervised by Dr. Richard Webb
  - Third-year project: Geometric group theory, supervised by Dr. Richard Webb

## EXPERIENCE

- **Teaching Skills Enhancement Programme** 2025–26  
*Memorial University of Newfoundland* St. John's, NL, Canada
  - Attends weekly seminar on teaching strategies and course design during Autumn 2025
  - Teaching apprenticeship scheduled in Winter 2026. This involves teaching, planning and design of the module MATH3331 Projective Geometry with Dr. Thomas Baird
- **Graduate Teaching Assistant** 2024–25  
*Department of Mathematics and Statistics, Memorial University of Newfoundland* St. John's, NL, Canada
  - Tutor at Maths Help Centre
  - Invigilator for mid-term and final exams
  - Teaching assistant for the following courses: MATH1001 Calculus II in Spring 2025; MATH4300/6332 General Topology/Point-set Topology in Winter 2025; MATH3300 Set Theory in Autumn 2024
- **Peer Assisted Study Sessions Leader** 2020–21  
*Department of Mathematics, University of Manchester* Manchester, England
  - Held weekly session across two semesters for a group of first-year undergraduate students in maths
  - Answered questions from students about first-year courses in mathematics

## PREPRINT

- [1] Haoyang He and Eduardo Martínez-Pedroza. **The curve complex as a coset intersection complex**, 2025. See <https://arxiv.org/abs/2510.23955> or [https://haoyang-he.github.io/files/cc\\_as\\_cic.pdf](https://haoyang-he.github.io/files/cc_as_cic.pdf).

## INVITED TALKS

- **Long-distance seminar in geometric group theory**, Online, 20th November 2025

## AWARDS AND HONOURS

- **BP Achievement Award** April 2020  
*Department of Mathematics, Faculty of Science and Engineering, University of Manchester* GB£1000
  - Awarded to two 1st-year undergraduate students in the Department for academic excellence

## CONFERENCES ATTENDED

- **Focus Programme on Algebraic Topology in memory of Fred Cohen** 23rd–25th July 2025  
*Fields Institute* Toronto, Ontario, Canada
- **Thematic Programme in Discrete Group in Topology and Algebraic Geometry** 9th–20th June 2025  
*Centre for Mathematics, University of Notre Dame* Notre Dame, Indiana, United States