

HAOYANG HE

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

INVITED TALKS

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

AWARDS AND HONOURS

- **BP Achievement Award** April 2020
GB£1000
Department of Mathematics, Faculty of Science and Engineering, University of Manchester
 - 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