LU Junyu

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https://hinamizawa.github.io/homepage/

Education

- **University of Manitoba** Winnipeg, MB, Canada
  In progress, Ph.D Mathematics *2021 - Present*
  - Supervisor: Adam Clay
  - Research Interests: Low-dimensional Topology and Geometry, Left-orderable Groups
- **McGill University** Montreal, QC, Canada
  MA Mathematics *2016 - 2018*
  - Master Thesis: On Convex Normal Subgroups
- **Nanyang Technological University** Singapore
  B.Sc. Physics *2008 - 2013*
  - First Class Honours

Teaching Experience

- Instructor
  - MATH 1500 Introduction to Calculus Winter 2023, UM
  - MATH 2170 Number Theory 1 Winter 2024, UM
- Teaching Assistant
  - MATH 1500, MATH 1524, MATH 1240, MATH 2040, MATH 2080, MATH 2090 *et cet.* in UM
  - MATH 141 in McGill, Winter 2017
  - Various first year calculus and algebra courses in NTU

Work Experience

- **Beijing Xiaolian (MultiVAC) Tech Ltd** Beijing, China
  Algorithm Researcher *June 2018 - Sep 2019*
  - Design configuration and protocol of blockchain and supervised its implementation
  - Determine infrastructure need and provide recommendations
  - Learn to develop and deploy part of infrastructure and troubleshot issues
- **Nanyang Technological University** Singapore
  Project Officer *Jan 2013 - Jan 2014, Aug 2014 - Aug 2015*
  - Teach fundamental calculus and algebra for first-year students with good teaching feedback
  - Help exchange the opinions of students and professors to improve the teaching quality
  - Participate in Geometry & Topology Research Group with focus on AJ conjecture

Research/Seminar Talk

- Order-detected Slopes on Cable Knots — Graduate Research Talk, Spring 2024 Redbud Conference
- A Step Towards Character Varieties and A-polynomials — GT Learning Seminar, UManitoba 2024
- A Layman's Introduction to Knots and Jones Polynomials — GT Learning Seminar, UManitoba 2023
- Left Orderability and 3-Manifold Groups — GMS Seminar, UManitoba 2023
- On Convex Normal Subgroups — GGT Seminar, Mcgill 2018

Publications and Preprints

- (with A. Clay) *Order-detection, representation-detection, and applications to cable knots*, 46 pages, submitted. ArXiv link

Awards

- Fellowship for Education Purposes — UManitoba, 2021-2024
- Grad Excellence Award in Mathematics & Statistics — McGill, 2017-2018

Other Skills

- Programming: Clojure/ClojureScript, Java, Python, Go, SQL