Updated April 25, 2025

EDUCATION

University of British Columbia, Vancouver, British Columbia

PhD in Mathematics under Prof. Liam Watson, 2020-now. MSc in Mathematics under Prof. Liam Watson, 2018-2020.

McGill University, Montréal, Québec

BSc Honors Mathematics with First Class Honors and Minor in Physics, 2014-2018.

Collège Jean-de-Brébeuf, Montréal, Québec DEC Sciences Pures et Appliquées, 2012-2014.

RESEARCH

An operator on bordered Khovanov homology induced by 2-cabling

In preparation.

A Remark on the Lewark-Zibrowius Invariant

Submitted for publication.

Thinking of (1, 1) knots using elastic bands on peg-boards and combed glazing on the

mille-feuille

MSc Thesis, August 2020

"A Study of the Dirac Monopole"

BSc Project, supervised by Prof. Niky Kamran, Fall 2017.

TEACHING

University of British Columbia

Teaching Assistant for the Department of Mathematics, 2018 - Present

Collège Jean-de-Brébeuf

Physics tutor, 2014-2016

INVITED TALKS 2025 March 6: Princeton Topology Seminar.

2023 May 5-7: Cornell Topology Festival.

2022 October 23-28: CMO BIRS Workshop: Using Quantum Invariants to do Interesting Topology.

AWARDS AND

British Columbia Graduate Scholarship #6768. Tenure: 2020

RECOGNITIONS Faculty of Science Graduate Award #6444. Tenure: 2018 to 2019

NSERC USRA, Summer 2016

CONFERENCES 2024 July 1-5: New structures in low-dimensional topology

AND 2023 June 5-16: Groups Around 3-Manifolds WORKSHOPS 2023 May 5-7: Cornell Topology Festival ATTENDED 2023 April 24 - May 5: Orderable Groups

2022 November 14-18: Floer Homotopical Methods in Low Dimensional and Sym-

plectic Topology

2022 August 4-7: Summer school on the mapping class groups of 4-manifolds

 $2022\ July\ 11\mbox{-}22\mbox{:}$ Séminaire de Mathématiques Supérieures 2022: Floer Homotopy Theory

 $2022\ March\ 1\mbox{-}8\mbox{:}$ Interactions of gauge theory with contact and symplectic topology in dimensions 3 and 4

 $2020\ June\ 7\mbox{-}12\mbox{:}$ Interactions of gauge theory with contact and symplectic topology in dimensions 3 and 4

2020 June 1-14: Nearly Carbon Neutral Geometric Topology Conference

2019 August 27-30: Current Progress in Low Dimensions

2019 August 5-7: Floer Homotopy Theory and Low-Dimensional Topology at the University of Oregon

 $2019\ June\ 30$ - $July\ 20$: PCMI Graduate Summer School. Topic: Quantum Field Theory and Manifold Invariants

2018 May 8-11: Perspectives on bordered Heegaard Floer Theory