

GABRIEL REMOND-TIEDREZ

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EDUCATION

McGill University

2024-present

PhD in Mathematics supervised by Jean-Philippe Lessard and Jason Bramburger

Current GPA: 4.00

University of Warwick

2019-2023

MMath in Mathematics

Overall average: 84/100, First Class Honours

AWARDS

C3SE 2026 Student Presentation Award

May 2026

Best Presentation Award for the outstanding presentation *Validating Polynomial Sum-of-Squares Decompositions: From Numerics to Proofs*. \$500 (CAD)

McGill Math & Stats Graduate Excellence Award

2024-2026

Award for outstanding PhD students. \$6000.00 (CAD) per academic year.

Undergraduate Research Support Scheme

Summer 2022

University of Warwick

Undergraduate research grant to study non-autonomous saddle-node bifurcations, supervised by Prof. Robert MacKay. £900.00.

PUBLICATIONS AND PREPRINTS

1. *Non-autonomous saddle-node bifurcations*
Undergraduate Research Support Scheme project report. 2022
2. *Adiabatic theory of a two-level quantum system*
Master's research project. 2023

TALKS

- International Conference of Undergraduate Research (ICUR) Sep. 2022
Non-autonomous saddle-node bifurcation: Theory and Illustrations
- 1st Canadian Congress on Computational Sciences and Engineering (C3SE) May 2026
Validating Polynomial Sum-of-Squares Decompositions: From Numerics to Proofs [[Slides](#)]

CONFERENCES/WORKSHOPS ATTENDED

- ISM (Institut des Sciences Mathématiques) Student Conference May 2025
- CRM (Centre de Recherches Mathématiques) Thematic Program Sep. 2024
Workshop - Computer-assisted proofs in nonlinear analysis

TEACHING EXPERIENCE

University of Warwick

- Graduate Teaching Assistant, year-long supervision of small group of first year students

McGill University

- Teaching Assistant for MATH315 Ordinary Differential Equations Winter 2025
- Teaching Assistant for MATH315 Ordinary Differential Equations Fall 2025
- Teaching Assistant for MATH133 Linear Algebra & Geometry Winter 2026
- Directed Reading Program: Supervision of 2 undergraduate students in an introductory research project Winter 2026

ADVANCED COURSES

University of Warwick

- MA3B8 Complex Analysis
- MA3D5 Galois Theory
- MA3D9 Geometry of Curves & Surfaces
- MA3F1 Introduction to Topology
- MA3H5 Manifolds
- MA3K4 Introduction to Group Theory
- MA448 Hyperbolic Geometry
- MA4H0 Applied Dynamical Systems
- MA359 Measure Theory
- MA424 Dynamical Systems
- MA427 Ergodic Theory
- MA4A7-15 Quantum Mechanics: Basic Principles & Probabilistic Methods
- MA4H9 Modular Forms
- MA4M7 Complex Dynamics

Concordia University

- MAST680 Advanced Ordinary Differential Equations

McGill University

- MATH578 Numerical Analysis I
- MATH565 Functional Analysis
- MATH695 Reading Course in Applied Math: Computer-assisted proofs
- MATH580 Partial Differential Equations I
- MATH563 Honours Convex Optimization

SERVICE

GSAMS Member of the Graduate Students Association for Mathematics and Statistics at McGill for the 2025-26 academic year as Vice-President Communications.

Pizza seminars Co-organizer of monthly student-run seminars for graduate students for the 2025-26 academic year.

LANGUAGES

English	Fluent
French	Native Language