

Faisal Romshoo

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EDUCATION

University of Waterloo <i>Ph.D. in Pure Mathematics</i> – Supervisor: Spiro Karigiannis	Waterloo, Canada 09/2024 – Present
University of Waterloo <i>M.Math in Pure Mathematics</i> – Thesis: “Perspectives on the moduli space of torsion-free G_2 -structures” – Supervisor: Spiro Karigiannis	Waterloo, Canada 09/2023 – 08/2024
University of Waterloo <i>B.Math in Pure Mathematics</i> – Honours: Major GPA: 91, Dean’s Honours, Co-op Program	Waterloo, Canada 01/2019 – 04/2023
École Polytechnique Fédérale de Lausanne (EPFL) <i>Exchange Semester</i>	Lausanne, Switzerland 02/2022 – 07/2022

PUBLICATIONS

Romshoo, F. Some Results on Calibrated Submanifolds in Euclidean Space of Cohomogeneity One and Two. *Mathematical Physics, Analysis and Geometry*, **29** (2026). [DOI: [10.1007/s11040-026-09552-4](https://doi.org/10.1007/s11040-026-09552-4), [arXiv:2508.01039](https://arxiv.org/abs/2508.01039)]

AWARDS

International Doctoral Student Award	2024 – Present
Pure Math Graduate Entrance Scholarship	2024 – Present
Graduate Research Studentship	2024 – Present
Women in Mathematics Mentorship Award	2025
Pure Math Grad Award	2023 – 2024
International Master’s Award of Excellence	2023
Mathematics Undergraduate Research Award (MURA)	2021, 2022
David Johnston International Experience Award	2022
President Scholarship	2019

TEACHING & SUPERVISION

Undergraduate Mentorship	
Women in Math Directed Reading Program <i>Project: The other cross product</i> – Mentees: Khushi Adukia, Chandni Wadhwa, and Margaret Puzio – Mentees: Smridhi Bawa and Caroline Knoke	University of Waterloo Fall 2025, Winter 2026

Teaching (University of Waterloo)

– MATH 137 (Calculus 1 for Honours Mathematics)	Fall '26
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Teaching Assistant (University of Waterloo)

- **MATH 137, MATH 640** (Number Theory for Teachers), **MATH 636** (Linear Algebra for Teachers) Spring '26
- **MATH 119** (Calculus 2 for Engineering), **PMATH 365** Winter '26
- **PMATH 465/665, MATH 227** (Calculus 3 for Honors Physics) Fall '25
- **MATH 127** (Calculus for Sciences), **PMATH 365** Spring '25
- **MATH 235** (Linear Algebra 2), **MATH 146** (Advanced Linear Algebra), **MATH 237** (Calculus 3) Winter '25
- **PMATH 465/665** (Smooth Manifolds) Fall '24
- **PMATH 365** (Differential Geometry) Winter '24
- **MATH 115** (Linear Algebra for Engineering) Fall '23

Undergraduate Marker & Tutor

- **MATH 228 Marker** (Differential Equations for Physics and Chemistry) Fall '21
- **MATH 136 Marker** (Linear Algebra) Winter '21
- **Mathematics Tutorial Center Tutor** 2023, 2024
- **Athletics and Recreation Tutor** 2020, 2021

INVITED TALKS

(poster) **Some Results on Calibrated Submanifolds in Euclidean Space of Cohomogeneity One and Two** *Young Geometers Meeting, University of Münster, Münster, Germany* 09/2026

CONFERENCES AND WORKSHOPS

Young Geometers Meeting, University of Münster, Münster, Germany 09/2026
School and Workshop on Geometric Analysis, ICTP, Trieste, Italy 08/2026
Séminaire de Mathématiques Supérieures: Flows and Variational Methods... 06/2024
Special Riemannian Metrics in Dimensions 6,7,8 04/2024

WORK EXPERIENCE

Department of Pure Mathematics, University of Waterloo Waterloo, Canada
Undergraduate Research Assistant 09/2022 – 12/2022

- *Riemann–Roch for Quantum Graphs*, supervised by Prof. Matthew Satriano.

Fields Institute & Krembil Research Institute Toronto, Canada
Research Student 07/2022 – 08/2022

- *Diffusion in Thin Pipes and Surfaces*, supervised by Dr. Maurizio De Pitta.

Department of Pure Mathematics, University of Waterloo Waterloo, Canada
Undergraduate Research Assistant 05/2021 – 08/2021

- *Born Metrics on Hyperelliptic Surfaces*, supervised by Prof. Ruxandra Moraru.

Wind River Systems Ottawa, Canada
Software Developer 09/2020 – 12/2020

- Worked at the Certification Office, creating tools to ensure industrial products met rigorous industry standards.

Auvik Networks Waterloo, Canada
Software Developer 01/2020 – 04/2020

- Worked with the Data Device Discovery team on the Collector Control project using Go microservices communicating through Apache Kafka, deployed to AWS using Docker and Kubernetes.