Caleb Suan Kai Wen (孙凯文)

• Email: calebkw@math.ubc.ca CONTACT INFORMATION • Personal Website: https://calebsuan.github.io RESEARCH Geometric analysis; Geometric flows (G₂ Laplacian Flow/ Coflow, Anomaly Flow); Manifolds **INTERESTS** with special holonomy (SU(3), G_2 , Spin(7)). **EDUCATION** The University of British Columbia, Vancouver, BC, Canada **Ph.D.** Mathematics Sep 2021 - Present Supervisor: Sébastien Picard University of Waterloo, Waterloo, ON, Canada Jan 2020 - Dec 2020 MMath, Pure Mathematics, • Thesis: Differential Operators on Manifolds with G_2 -Structure • Supervisor: Spiro Karigiannis BMath, Pure Mathematics/ Combinatorics and Optimization, Sep 2013 - Dec 2019 • Honors, Co-operative Program · With Distinction PREPRINTS AND [1] H. N. Sá Earp, J. Saavedra, and C. Suan; **PUBLICATIONS** "Laplacian Coflows of G₂-Structures on Contact Calabi–Yau 7-Manifolds", arXiv:2406.15254 (Jun 2024) [2] B. Friedman, S. Picard, and C. Suan; "Gromov-Hausdorff Continuity of Non-Kähler Calabi-Yau Conifold Transitions", arXiv:2404.11840 (Apr 2024) [3] S. Picard and C. Suan; "Flows of G_2 Structures associated to Calabi–Yau Manifolds"; to appear in *Mathematical Resesarch Letters*; arXiv:2209.03411 (Sep 2022) INVITED TALKS • CRM Workshop: Special Riemannian Geometries in Dimensions 6, 7, 8 (Apr 2024) "Gromov-Hausdorff Continuity of Non-Kähler Calabi-Yau 3-Folds" • UC - Irvine Generalized Ricci Flow Learning Seminar (Dec 2023) "Flows of G_2 Structures associated to Calabi-Yau Manifolds" • BIRS Workshop: Spinorial and Octonionic Aspects of G_2 and Spin(7) Geometry (May 2023) "Flows of G_2 Structures associated to Calabi–Yau Manifolds" **TEACHING** The University of British Columbia, Vancouver, BC, Canada

Small Class/ Workshop Instructor

Sep 2021 - Present

- MATH 180: Differential Calculus with Applications (2023 Winter Term I)
- MATH 190: Calculus Survey (2022 Winter Term I)

Teaching Assistant Sep 2021 - Present

- MATH 264: Vector Calculus for Electrical Engineering (2023 Winter Term II)
- MATH 220: Mathematical Proof (2022 Winter Term II)
- MATH 421: Real Analysis II (2021 Winter Term II)
- MATH 223: Linear Algebra (2021 Winter Term I)

University of Waterloo, Waterloo, ON, Canada

Teaching Assistant Jan 2020 - Dec 2020

- PMATH 365: Differential Geometry (Winter 2020)
- MATH 136: Linear Algebra 1 for Honours Mathematics (Winter 2020)
- PMATH 352: Complex Analysis (Spring 2020)
- PMATH 465: Geometry of Manifolds (Fall 2020)
- MATH 147: Calculus 1 (Advanced Level) (Fall 2020)

Undergraduate Tutor

Sep 2016 - Dec 2016

• MATH 137: Calculus 1 for Honours Mathematics (Fall 2016)

OTHER RESEARCH

University of Waterloo, Waterloo, ON, Canada

NSERC Undergraduate Research Assistant

May 2019 - Aug 2019

- Project: The Almost Invariant Subspace Problem
- Supervisor: Laurent Marcoux

NSERC Undergraduate Research Assistant

May 2018 - Aug 2018

- Project: Vortex Solutions on Riemann Surfaces from Hyperbolic Tessellations
- Supervisor: Benoit Charbonneau

AWARDS AND SCHOLARSHIPS

• Four Year Doctoral Fellowship 2021

The University of British Columbia

• President's Academic Excellence Award 2021

The University of British Columbia

NSERC Alexander Graham Bell Canada Graduate Scholarship - Masters
University of Waterloo

• President's Graduate Scholarship 2021

University of Waterloo

• Outstanding Teaching Assistant Award 2020

University of Waterloo

• NSERC Undergraduate Student Research Award 2020

University of Waterloo

• NSERC Undergraduate Student Research Award 2019

University of Waterloo

• University of Waterloo 50th Anniversary Scholarship 2018

University of Waterloo

• Faculty of Mathematics Scholarship 2014

University of Waterloo

• University of Waterloo President's Scholarship University of Waterloo 2014