Caleb Suan Kai Wen (孙凯文)   **Curriculum Vitae**

CONTACT INFORMATION	• Email: *calebkw@math.ubc.ca* • Personal Website: *https://calebsuan.github.io*

RESEARCH INTERESTS

Geometric analysis; Geometric flows (G_2 Laplacian Flow/ Coflow, Anomaly Flow); Manifolds with special holonomy ($SU(3), G_2, Spin(7)$); Conifold Transitions; Hull–Strominger system.

EDUCATION

The University of British Columbia, Vancouver, BC, Canada

PhD, Mathematics   Sep 2021 - Apr 2025
- Thesis: *Deformations of Special Structures in Dimensions 6 and 7*
- Supervisor: Sébastien Picard

University of Waterloo, Waterloo, ON, Canada

MMath, Pure Mathematics,   Jan 2020 - Dec 2020
- 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, Dean's Honours List

PREPRINTS AND PUBLICATIONS

[1] Caleb Suan
"Anomaly Flow: Shi-Type Estimates and Long-time Existence",
preprint, arXiv:2408.15514

[2] Henrique N. Sá Earp, Julieth Saavedra, and Caleb Suan
"Laplacian Coflows of G_2-Structures on Contact Calabi–Yau 7-Manifolds",
preprint, arXiv:2406.15254

[3] Benjamin Friedman, Sébastien Picard, and Caleb Suan
"Gromov–Hausdorff Continuity of Non-Kähler Calabi–Yau Conifold Transitions",
preprint, arXiv:2404.11840

[4] Sébastien Picard and Caleb Suan
"Flows of G_2 Structures associated to Calabi–Yau Manifolds",
Mathematical Resesarch Letters 31 (2024) No. 6, 1837-1877, arXiv:2209.03411

INVITED TALKS

- University of British Columbia Mathematics Colloquium (Mar 2025)

  "Deformations of Special Structures in Dimensions 6 and 7"

- Universität Hamburg Differential Geometry Research Seminar (Jan 2025)

  "Conifold Transitions and the Anomaly Flow"

- Rutgers – Newark Mathematics Colloquium (Nov 2024)

  "Long-time Existence of the Anomaly Flow"

- 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 100: Differential Calculus with Applications to Physical Sciences and Engineering (2024 Winter Term II)
- MATH 180: Differential Calculus with Physical Applications (2024 Winter Term I)
- MATH 180: Differential Calculus with Physical 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 465: Geometry of Manifolds (Fall 2020)
- MATH 147: Calculus 1 (Advanced Level) (Fall 2020)
- PMATH 352: Complex Analysis (Spring 2020)
- PMATH 365: Differential Geometry (Winter 2020)
- MATH 136: Linear Algebra 1 for Honours Mathematics (Winter 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	**Stanley M. Grant Scholarship in Mathematics** 2024

University of British Columbia

Four Year Doctoral Fellowship   2021

University of British Columbia

President's Academic Excellence Award   2021

University of British Columbia

NSERC Alexander Graham Bell Canada Graduate Scholarship – Masters   2021

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	2014
	University of Waterloo	

SERVICE	**University of British Columbia Differential Geometry Learning Seminar**	
	Organizer	Sep 2024 - Apr 2025
	Co-organizer	Jan 2024 - Aug 2024
	Journal Referee	
	Mathematische Zeitschrift	