## Caleb Suan Kai Wen (孙凯文)

CONTACT Email: calebkw@math.ubc.ca

INFORMATION Personal Website: https://calebsuan.github.io

RESEARCH INTERESTS Geometric analysis, geometric flows, manifolds with special holonomy.

EDUCATION The University of British Columbia, Vancouver, BC, Canada

**Ph.D**, Mathematics Sep 2021 - Present

• Supervisor: Sébastien Picard

University of Waterloo, Waterloo, ON, Canada

M.Math, Pure Mathematics,

• Thesis: Differential Operators on Manifolds with  $G_2$ -Structure

• Supervisor: Spiro Karigiannis

**B.Math**, Pure Mathematics/ Combinatorics and Optimization, Sep 2013 - Dec 2019

• Honors, Co-operative Program

• With Distinction

**PUBLICATIONS** 

[1] S. Picard and C. Suan, Flows of  $G_2$  Structures associated to Calabi–Yau Manifolds, to appear in *Mathematical Research Letters*, arXiv:2209.03411

INVITED TALKS

• 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

## TEACHING

## The University of British Columbia, Vancouver, BC, Canada

Teaching Assistant

• MATH 220: Mathematical Proof - 2022 Winter Term II - Marking

• MATH 190: Calculus Survey - 2022 Winter Term I - Workshops

MATH 421: Real Analysis II - 2021 Winter Term II - Marking
 MATH 223: Linear Algebra - 2021 Winter Term I - Marking

University of Waterloo, Waterloo, ON, Canada

Teaching Assistant

Jan 2020 - Dec 2020

Sep 2021 - Present

Jan 2020 - Dec 2020

• PMATH 365: Differential Geometry - Winter 2020 - Marking

• MATH 136: Linear Algebra 1 for Honours Mathematics - Winter 2020 - Marking

• PMATH 352: Complex Analysis - Spring 2020 - Marking

• PMATH 465: Geometry of Manifolds - Fall 2020 - Marking

• MATH 147: Calculus 1 (Advanced Level) - Fall 2020 - Marking

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
	<ul> <li>Project: The Almost Invariant Subspace Problem</li> <li>Supervisor: Laurent Marcoux</li> </ul>	
	NSERC Undergraduate Research Assistant	May 2018 - Aug 2018
	<ul> <li>Project: Vortex Solutions on Riemann Surfaces from Hyperbolic Tessellations</li> <li>Supervisor: Benoit Charbonneau</li> </ul>	
AWARDS AND SCHOLARSHIPS	Four Year Doctoral Fellowship     The University of British Columbia	2021
	President's Academic Excellence Award     The University of British Columbia	2021
	NSERC Alexander Graham Bell Canada Graduate Scholarship - University of Waterloo	Masters 2021
	President's Graduate Scholarship     University of Waterloo	2021
	Outstanding Teaching Assistant Award     University of Waterloo	2020
	NSERC Undergraduate Student Research Award     University of Waterloo	2020
	NSERC Undergraduate Student Research Award     University of Waterloo	2019
	<ul> <li>University of Waterloo 50th Anniversary Scholarship University of Waterloo</li> </ul>	2018
	• Faculty of Mathematics Scholarship University of Waterloo	2014
	University of Waterloo President's Scholarship     University of Waterloo	2014