

Benjamin Walter Wild

Email: benwwild *at* uvic.ca

Education

M.Sc. in Mathematics (2022-Present)

Institution: University of Victoria, Victoria, BC

Research Interests: Dynamical Systems, Non-smooth Dynamical Systems, Non-linear Dynamics, Differential Equations, Network Dynamics, Complex Dynamics, Chaos.

Supervisor: Dr. Rod Edwards

B.Sc. Honours (with Distinction) in Mathematics and Physics (2018-2022)

Institution: University of Victoria, Victoria, BC

Awards and Scholarships

British Columbia Graduate Scholarship (Fall 2023)

Value: \$17,500, I got more than normal.

Details: A limited contribution of funds has been provided by The Ministry of Advanced Education, Skills and Training to support graduate students of high academic standing. With an emphasis on recruitment, these merit-based scholarships are used to attract and fund academically exceptional students enrolled in both research-based and Professional graduate programs at the University of Victoria. The typical value of each scholarship is \$15,000. Eligibility:

- Canadian and Permanent Residents,
- Master's and Doctoral programs,
- Minimum A- average on the last two years of course work. Meeting the minimum eligibility does not guarantee you will receive a scholarship,
- Entering or returning students enrolled in research-intensive or Professional programs,
- Full-time registration.

Departments that have received a BCGS allocation from their Faculty will select and nominate only the strongest students for these scholarships.

University of Victoria Graduate Award (Fall 2023)

Value: \$4000, less than the first because I got the very large scholarship above.

Details: UVic Graduate Awards of up to \$10,000 per student per academic year may be awarded to students with a minimum GPA of 6.00/9.00 or second class standing who are registered in a graduate degree program. Minimum registration is 1.50 units per term. Eligible students would be awarded these based on a recommendation from their academic department. The department determines the value of the Graduate Award offer.

University of Victoria Graduate Award (Fall 2022)

Value: \$4500.

Details: Same as above.

Talks

Entropy Upper Bounds for Glass Networks (Fall 2022)

at University of Victoria Applied Math Seminar

Professional Experience

Research Assistant (Summer 2021)

Institution: University of Victoria, Department of Mathematics and Statistics, Victoria, BC.

Supervisor: Dr. Rod Edwards

Job Description: I was hired by Dr. Edwards as a research assistant to investigate the affect of frequency injection on the chaotic behaviour of Glass networks. The conclusions we came to were that in “very chaotic” systems, the injection of a periodic frequency had little to no affect in ordering the chaotic behaviour of the network. However, in the cases where a network was chaotic, but not too messy, the injection of a period frequency would disrupt the chaos and would result in dynamics that were more predictable. Glass networks have been proposed as potential candidates for True Random Number Generators and as a result, networks with highly chaotic solutions that are unaffected by frequency injection are highly desired in this application.

Teaching Experience

At the University of Victoria:

Tutorial Instructor for Math 109 - Introduction to Calculus (Fall 2023)

Job Description: Lead weekly tutorials which supplement the course lectures. Mini lectures are given by the tutorial instructor and practice problems are discussed.

Marker for Math 301 - Complex Variables (Fall 2023)

Job Description: Mark course assignments and examinations.

Tutorial Instructor for Math 101 - Calculus II (Summer 2023)

Job Description: Lead weekly tutorials which supplement the course lectures. Mini lectures are given by the tutorial instructor and practice problems are discussed.

Math and Stats Assistance Centre Tutor (Spring 2023)

Job Description: Tutor students needing general help in mathematics. This can range from homework to helping them understanding basic concepts.

Marker for Math 379 - Nonlinear Dynamical Systems and Chaos (Spring 2023)

Job Description: Mark course assignments and examinations.

Marker for Math 109 - Introduction to Calculus (Spring 2023)

Job Description: Mark course assignments and examinations.

Marker for Math 211 - Matrix Algebra I (Fall 2022)

Job Description: Mark course assignments and examinations.

Skills and Languages

English Native speaker

Python Proficient

L^AT_EX Proficient

Mathematica Intermediate

MATLAB Intermediate

Personal Interests

Painting and Drawing: A creative outlet of mine that I do outside of mathematics.

Cooking: I love to cook and since my mother is Italian, I never run out of inspiration.

Playing the Piano: I don't play often, but it is something I enjoy when I get time.

Making Wine: My family makes wine the same way my grandfather did in Italy.

Athletics and Outdoors: I like to ride my bike, ski, Weight lift, swim, hike and really just be outdoors.