

Calder Morton-Ferguson

University of Toronto
Department of Mathematics

calder.morton.ferguson@mail.utoronto.ca
(519) 830-7580

Education

University of Toronto

B.Sc., Mathematics. GPA: 4.0
Mathematics Specialist, Computer Science Minor
Anticipated graduation: Spring 2019.

John F. Ross, CVI

Ontario Secondary School Diploma, 2015.

Coursework

Mathematics courses taken at the University of Toronto:

Undergraduate courses: Analysis I and II (MAT157/257), Linear Algebra I and II (MAT240/247), Advanced ODEs (MAT267), Real Analysis (MAT357), Complex Analysis (MAT354), Introduction to Topology (MAT327), Abstract Algebra (MAT347), Seminar in Number Theory (MAT477), Computability and Logic (CSC438), Reading in Modular Forms (MAT395), Reading in Algebraic Geometry (MAT496).

Graduate courses: Algebra I and II (MAT1100/1101), Geometry and Topology (MAT1300), Algebraic Topology (MAT1301).

Research

NSERC Undergraduate Student Research Award, 2018

Topology of quiver flag varieties, supervised by Professor Joel Kamnitzer

NSERC Undergraduate Student Research Award, 2017

3-manifold topology, supervised by Professor Dror Bar-Natan

Academic Talks

Canadian Undergraduate Math Conference, 2017

“Visualizing the Prime Decomposition of 3-Manifolds” July 19-23, 2017.
University of Quebec at Montreal, Montreal, QC.

Canada Math Camp, 2017

“Conway’s Sequences and Nested Recursions” July 31-August 4, 2017.
University of Toronto, Toronto, ON.

Crime and Punishment at 150, 2016

“The Changing Role of Urban Environments Since *Crime and Punishment*.” October 20-22, 2016. University of British Columbia, Vancouver, BC.

Canadian Undergraduate Math Conference, 2016

“Why Some Sequences Are More Special Than Others.” July 13-17, 2016.
University of Victoria, Victoria, BC.

Articles	<p>“Harmonic graphs and complexity in tonal music” in <i>Notes from the Margin</i>, Canadian Mathematical Society, Fall 2016.</p>
Workshops & Seminars	<p>Thematic Program in Geometric Representation Theory June 11-15, 2018. Notre Dame University, IN.</p> <p>Alexander Grothendieck Memorial Day December 10, 2015. Fields Institute, Toronto, ON.</p>
Teaching	<p>Teaching Assistant, University of Toronto</p> <p>MAT137Y1 (Calculus) 2017-2018 MAT136H1 (Calculus 1B) Spring 2017 MAT135H1 (Calculus 1A) Fall 2016</p>
Awards	<p>Samuel Beatty In-Course Scholarship, 2018 Margaret Taylor and Thomas Taylor Scholarships in Mathematics, 2017 Innis College LLL Scholarship in Mathematics, 2016 University of Toronto Scholar, 2016 awarded to the top 100 students in the graduating class of 2019 University of Toronto President’s Entrance Scholarship, 2015 John F. Ross English Department Award of Excellence, 2015 John F. Ross Mathematics Faculty Award, 2015 Victoria-Guelph Chapter Community I.O.D.E Award, 2015 Ontario Scholar, 2015 Euclid Mathematics Contest Regional Winner, 2015 Guelph Youth Music Centre Piano Performance Excellence Award, 2014</p>
Involvement	<p>University of Toronto Mathematics Union President, 2017-Present. Vice-President Communications, 2016-2017.</p> <p>Research Assistant, Summer 2016 TorchLight Canada</p> <p>Tutor and Student Transition Mentor, 2013-2015 John F. Ross CVI, Guelph</p> <p>Pianist and Volunteer, 2013-2015 The Royal On Gordon Retirement Home, Guelph</p> <p>Legislative Page, Fall 2010 Legislative Assembly of Ontario</p>
Languages & Skills	<p>Fluent in English, French, Java, and Python. National Novel Writing Month Winner, 2012. Piano, accordion, and trombone performance. Classical and jazz composition.</p>