

Charles Godfrey

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Education

PhD in Mathematics, The University of Washington-Seattle June 2021 (expected)

- Advisor: Sándor Kovács
- Thesis: *Residue triangles and resolutions of pairs*
- Completed the eScience Institute's Advanced Graduate Data Science Option

B.S. in Mathematics and Physics, The University of Wisconsin-Madison May 2014

Academic positions

Program Associate, Mathematical Sciences Research Institute March-May 2019

- Participated in the *Birational Geometry and Moduli Spaces* research program

Awards

Department of Mathematics Graduate Fellowship, The University of Washington-Seattle 2018-2019

Publications and preprints

- [1] Spr. 2017. *Thrifty Rational Resolutions in Arbitrary Characteristic (Master's Thesis)*. URL: math.washington.edu/~cgodfrey/assets/pdfs/thrift_ratl.pdf.

Talks

- [1] Spr. 2019a. "Logarithmic Chow-to-Hodge Cycle Maps" (Mathematical Sciences Research Institute Graduate Student Seminar).
- [2] Sum. 2019b (with Kapila Kottegoda, Oliver Knitter, and Yunpeng Shi). "Survey of Linear Stochastic Bandits" (MSRI Mathematics of Machine Learning Summer School).
- [3] Aut. 2018. "The Cohomology of a Smooth Hypersurface" (The University of Washington Graduate Student 1, 2, 3 Seminar).
- [4] Win. 2017. "The Cone of Curves" (The University of Washington Graduate Student MMP Seminar).

Teaching

Pre-doctoral Teaching Assistant, The University of Washington-Seattle September 2014-present

- *Main instructor*: Introduction to Differential Equations, Calculus I, Calculus III, Algebra with Applications, Introduction to Mathematical Reasoning, Graduate Prelim Exam Practice Course
- *Teaching assistant*: Pre-Calculus, Calculus I-III, Linear Algebra
- *Grader*: Graduate Abstract Algebra

Graduate Mentor, Washington Experimental Math Laboratory January-June 2019, March-June 2020

- Mentored a undergraduate research projects on topics such as the foundations of quantum mechanics and mathematical epidemiology
- Faculty Mentors: Jarod Alper, Benjamin Feintzeig

Other research experience

Research Experience, The University of Minnesota School of Physics and Astronomy Summer 2013

- Designed and performed experiments using the BL21Rosetta2 strain of *E. coli* in the context of synthetic biology. Used MATLAB for to solve differential equations modelling genetic circuits
- Principal Investigator: Vincent Noireaux

Extracurricular

Electric Bassist, Look At Me's, Young Chhaylee Spring 2016-present

- Electric bass in rock, R&B, neo-soul and singer-songwriter styles, writing bass lines to original songs
- Venues performed at: Doe Bay Fest 2019, Timbrrrr! Music Festival 2019, The Tractor Tavern, The High Dive, The Sunset Tavern, The Columbia City Theater, Barboza.