# Michael Morrow

Department of Mathematics, University of Kentucky

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#### **EDUCATION**

# University of Kentucky (Mathematics Ph.D. Program)

August 2019 - Present

Research focus: Commutative Algebra

Advisor: Uwe Nagel (website: http://www.ms.uky.edu/~uwenagel/)

### Central Washington University (B.S. Mathematics)

June 2017 - June 2019

### **Everett Community College**

September 2015 - June 2017

#### ACADEMIC FIELD EXPERIENCE

# University of Kentucky Graduate Teaching Assistant

August 2019 - Present

Recitation leader and primary instructor

### Kittitas Valley Math Circle

September 2017 - June 2019

Explored mathematical problem solving with students, teachers and parents

### Math Tutor (Everett Community College)

2016-2017 School Year

Tutored college students in Calculus 1-4 and Linear Algebra

# UK Julia Robinson Math Festival

November 2019

Introduced mathematics in a fun and non-competitive environment to middle school and high school students

### ACADEMIC AWARDS

Eaves Fellowship Summer 2022

Dale and Mary Jo Comstock Scholarship 2019

#### CONFERENCES ATTENDED

# Macaulay2 Conference

Cleveland State University, May 2022

#### WARTHOG

University of Oregon, June 2022 Infinite-dimensional methods in commutative algebra

#### **PRESENTATIONS**

#### Mt. Stuart Math Seminar

"Perfect Subsets of the Unit Interval: Some Surprising Results about the Real Numbers" Central Washington University, April 2019

Slides: https://michaelmorrow.org/files/chipset\_pres.pdf

### Master's Presentation

"Equivariant Gröbner Bases" University of Kentucky, April 2021

Slides: https://michaelmorrow.org/files/masters pres.pdf

# Qualifying Exam

"Finite Computation of Gröbner Bases for OI-Modules"

University of Kentucky, December 2021

Slides: https://michaelmorrow.org/files/qual\_pres.pdf

# AMS Fall Southeastern Sectional Meeting

"Gröbner Bases and Syzygies of Sequences of Related Ideals"

University of Tennessee at Chattanooga, October 2022

Website: https://meetings.ams.org/math/fall2022se/meetingapp.cgi/Paper/16457

Slides: https://michaelmorrow.org/files/ams\_10-15-2022.pdf

#### Algebra Seminar

"Computing Free Resolutions of OI-Modules" University of Kentucky, November 2022

Slides: https://michaelmorrow.org/files/algsem\_11-2-2022.pdf

# TEACHING - UNIVERSITY OF KENTUCKY

# As recitation leader:

- MA109 College Algebra
- MA110 Algebra and Trig for Calculus
- MA123 Elementary Calculus
- MA137 Calc for Life Sciences
- MA162 Finite Math
- MA213 Calculus III
- MA114 Calculus II

#### MISCELLANEOUS

#### OIGroebnerBases.m2

A Macaulay2 package for computation in OI-modules over Noetherian polynomial OI-algebras See https://github.com/morrowmh/OIGroebnerBases