

Michael Morrow

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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/>)

University of Kentucky (M.S. Mathematics)

April 2021

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

UKY Julia Robinson Math Festival

November 2019

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

Algebra Prelim Coaching

December 2022 and May 2023

Coached students to help them pass the UKY algebra prelim exam

ACADEMIC AWARDS

Summer Research Fellowship

University of Kentucky, Summer 2023

Eaves Fellowship

University of Kentucky, Summer 2022

Dale and Mary Jo Comstock Scholarship

Central Washington University, 2019

CONFERENCES ATTENDED

Macaulay2 Conference

Cleveland State University, May 2022

WARTHOG

University of Oregon, June 2022

Infinite-dimensional methods in commutative algebra

AMS Fall Southeastern Sectional Meeting

University of Tennessee at Chattanooga, October 2022

Spectra Survey of Mathematics Conference

University of Kentucky, May 2023

Commutative Algebra and its Interaction with Algebraic Geometry

University of Notre Dame, May 2023

SLMath summer school

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://michaelhmorrow.com/files/chipset_pres.pdf

Master's Presentation

"Equivariant Gröbner Bases"

University of Kentucky, April 2021

Slides: https://michaelhmorrow.com/files/masters_pres.pdf

Qualifying Exam

"Finite Computation of Gröbner Bases for OI -Modules"

University of Kentucky, December 2021

Slides: https://michaelhmorrow.com/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://michaelhmorrow.com/files/gseq_v1.pdf

UKY Algebra Seminar

“Computing Free Resolutions of OI-Modules”

University of Kentucky, November 2022

Slides: https://michaelhmorrow.com/files/compfree_algsem.pdf

Spectra Survey of Mathematics Conference

“Gröbner Bases and Syzygies of Sequences of Related Ideals”

University of Kentucky, May 2023

Slides: https://michaelhmorrow.com/files/gseq_v2.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

As primary instructor:

- MA322 Matrix Algebra

MISCELLANEOUS

OIGroebnerBases.m2

A Macaulay2 package for computation in OI-modules over Noetherian polynomial OI-algebras

See <https://github.com/morrowmh/OIGroebnerBases>