

# Michael Morrow

Department of Mathematics, University of Kentucky

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Website: <https://michaelmorrow.org>

## EDUCATION

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### 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

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### 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

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### Eaves Fellowship

*University of Kentucky, Summer 2022*

### Dale and Mary Jo Comstock Scholarship

*Central Washington University, 2019*

## CONFERENCES ATTENDED

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### 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*

## **PRESENTATIONS**

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### **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](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](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](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](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](https://michaelmorrow.org/files/algsem_11-2-2022.pdf)

## **TEACHING - UNIVERSITY OF KENTUCKY**

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### **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

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### **OIGroebnerBases.m2**

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

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