# Michael Morrow

Department of Mathematics, University of Kentucky

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#### Education

University of Kentucky, Kentucky, USA

Ph.D. Mathematics

Advisor: Uwe Nagel August 2019 - Present

University of Kentucky, Kentucky, USA

M.S. Mathematics April 2021

Central Washington University, Washington, USA

**B.S.** Mathematics June 2019

#### Research Interests

Computational and combinatorial commutative algebra, asymptotic algebra

### **Publications and Preprints**

Computing Gröbner Bases and Free Resolutions of OI-Modules with U. Nagel, submitted, available at arXiv:2303.06725.

## Awards and Fellowships

Summer Research Fellowship

University of Kentucky Summer 2023

Eaves Fellowship

University of Kentucky Summer 2022

Dale and Mary Jo Comstock Scholarship

Central Washington University Spring 2019

### Talks and Presentations

Syzygy Computations in OI-Modules

• (Invited) Joint Mathematics Meetings, San Francisco, CA January 2024

Computing Free Resolutions of OI-Modules

November 2022 • Algebra Seminar, University of Kentucky

Computing Gröbner Bases and Free Resolutions of OI-Modules

• (Poster) BrianFest, University of Nebraska-Lincoln August 2023

Gröbner Bases and Syzygies of Sequences of Related Ideals

• Spectra Survey of Mathematics Conference, University of Kentucky May 2023

October 2022 • (Invited) AMS Fall Southeastern Sectional Meeting, University of Tennessee-Chattanooga

Finite Computation of Gröbner Bases for OI-Modules

December 2021 • Qualifying Talk, University of Kentucky

Equivariant Gröbner Bases

• Master's Talk, University of Kentucky April 2021

#### Conferences and Workshops

BrianFest

University of Nebraska-Lincoln August 2023

**Summer CAMP** 

Professional development workshop

University of Nebraska-Lincoln August 2023

Commutative Algebra and its Interaction with Algebraic Geometry SLMath summer school University of Notre Dame May 2023 Spectra Survey of Mathematics Conference University of Kentucky May 2023 AMS Fall Southeastern Sectional Meeting University of Tennessee-Chattanooga October 2022 WARTHOG Infinite-dimensional methods in commutative algebra University of Oregon June 2022 Macaulay2 Conference Cleveland State University May 2022 Teaching Experience Instructor of Record, University of Kentucky • Matrix Algebra Spring 2023 • College Algebra Summer 2021, Summer 2020 Recitation Leader, University of Kentucky • Elementary Calculus Fall 2023 (Lead TA), Spring 2020 • Calculus II Fall 2022 • Calculus III Spring 2022 • Calc for Life Sciences Fall 2021 • Finite Math Spring 2021 • Algebra and Trig for Calculus Fall 2020, Fall 2019 Algebra Prelim Peer Coach, University of Kentucky May 2023, December 2022 Service and Outreach Algebra Seminar Co-organizer University of Kentucky Fall 2023 Graduate Student Peer Mentor University of Kentucky Fall 2020 - Fall 2022 Panel for Incoming First-Year Students

August 2021

November 2019

September 2017 - June 2019

University of Kentucky

University of Kentucky

Julia Robinson Math Festival

Kittitas Valley Math Circle Central Washington University