

William C. Newman

Education

2020 - (2026) **PhD in Mathematics** Advisor: Hsian-Hua Tseng *Ohio State University*
2016 - 2020 **Bachelor of Science in Mathematics** *University of Michigan*

Research Papers

The first higher Chow groups of $M_{1,n}$ for $n \leq 4$ <https://arxiv.org/abs/2508.20264>
Chow rings of moduli spaces of genus 0 curves with collisions In Preparation
Orbifold Tevelev Degrees w/ Deniz Genlik and Hsian-Hua Tseng In Preparation
Injectivity of quadratic self maps of P^2 w/ Michael E. Zieve In Preparation
Stacky Nodal Curves w/ Martin Bishop In Preparation

Seminar Presentations

Chow Rings of Moduli Spaces Via Higher Chow Groups:

Apr 2025 **UIUC** Algebraic Geometry Seminar
Sep 2024 **ETH Zurich** Algebraic Geometry and Moduli Seminar
Sep 2024 **The Ohio State University** Algebraic Geometry Seminar

Awards

Jan 2026 **Research Training Grant Funding for Spring 2026**
Aug 2024 **Research Training Grant Funding for Fall 2024**
Aug 2023 **Research Training Grant Funding for Fall 2023**
Aug 2020 **Distinguished University Fellowship**

Conferences Attended

Nov 2024 **AlGeCom**
Oct 2024 **Tevelev Degrees**
May 2024 **Workshop of the Kentucky-Ohio Algebra Alliance**
May 2024 **Local Systems in Algebraic Geometry**
Jul 2023 **AGNES Summer School - Intersection Theory on Moduli Spaces**
Jun 2023 **Arithmetic, Birational Geometry, and Moduli Spaces**
May 2023 **Workshop of the Kentucky-Ohio Algebra Alliance**
Oct 2022 **AlGeCom**
Jul 2022 **Derived Categories, Moduli Spaces, and Hyperkähler Varieties**

Leadership

May 2021 - Present **OSU Cycle Committee Member**
Apr 2022 - Apr 2024 **Organizer of the OSU Student AG Seminar**

Outreach

Aug 2021 - Present **OSU Cycle Mentor**
Jul 2022, Jul 2023, Jul 2024 **Buckeye Aha Math Moments Camp Counselor**

Student Seminar Presentations

Nov 2024 **$M_{0,n}$ and $\bar{M}_{0,n}$** *OSU Student AG Seminar*
Aug 2024 **Chow 101** *OSU Student AG Seminar*

Apr 2024 **Rational Curves on K3 Surfaces** *OSU Student AG Seminar*
 Jan 2024 **A Diophantine Equation** *OSU Student Number Theory Seminar*
 Nov 2023 **Chow 102** *OSU Student AG Seminar*
 Sep 2023 **Moduli Spaces** *OSU Math Graduate Student Association Seminar*
 Sep 2023 **The Jacobian Conjecture** *OSU Student AG Seminar*
 Jul 2023 **Candidacy Presentation** *The Ohio State University*
 Apr 2023 **Curves through 3d-1 points** *OSU Student AG Seminar*
 Oct 2022 **Chow Groups and Motives** *OSU Student AG Seminar*
 Sep 2022 **Counting Conics** *OSU Student AG Seminar*
 Mar 2022 **Semistable Reduction of Curves** *OSU Student AG Seminar*
 Sep 2021 **Injective Quadratic Maps $P^2 \rightarrow P^2$** *OSU Student AG Seminar*

Teaching

Spring 2024 **Math 1126 - Math for Elementary School Teachers 2**
 Spring 2023 **Math 2173 - Engineering Math B**
 Fall 2022 **Math 2173 - Engineering Math B**
 Spring 2022 **Math 1172 - Engineering Math A**
 Fall 2021 **Math 1151 - Calculus 1**