# C. Eric Overton-Walker

# ~Curriculum Vitae~

University of Arkansas

**Department of Mathematical Sciences** 

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#### Education.

PhD Candidate in Mathematics; advisor: Prof. Lance Edward Miller.	University of Arkansas	in progress
MS in Mathematics.	University of Arkansas	May 2018
BA cum laude with distinction in Mathematics and in Spanish; math advisor: Prof. Christopher S. Camfield; thesis: An Open Door to Geometric Measure Theory.	Hendrix College	May 2016

#### Research Interests.

Homological and homotopical algebra, singularities in positive characteristic, derived methods in commutative algebra and algebraic geometry.

## Honors and Awards.

John C. Massie Memorial Fund	University of Arkansas	2021-2022
William Alton Anderson Endowed Scholarship in Arts & Sciences	University of Arkansas	2019-2020
Julia Hicks Endowed Graduate Teaching Award	University of Arkansas	2018-2019
Lawrence Jesser Toll, Jr. Endowed Fund	University of Arkansas	2017-2018

## Publications and Preprints.

Derived jets and arcs	[arXiv forthcoming]
In preparation with Lance Edward Miller	[dixiv formcoming]

#### Talks.

Graduate student colloquium (internal)  What's on the mind of air traffic controllers and algebraic geometers? #2 (Blowing up points on the plane)	17 November 2021
CARES: Commutative Algebra Regional Expository Seminar (virtual)  The module of Kähler differentials	12 October 2021
Jet Spaces / Arc Spaces Learning Seminar (UCSD, virtual)  Jets, arcs, and cylinders	19 May 2021
CARES: Commutative Algebra Regional Expository Seminar (virtual)  Macaulay2 Panel (joint with Michael DeBellevue, Alexander Duncan, David Smith)	15 April 2021
CARES: Commutative Algebra Regional Expository Seminar (virtual)  Jet and arc spaces from a commutative algebra point of view	11 March 2021
The Curry Seminar: Algebra and topology seminar (internal) The Silmarillion: K-Theory	13 October 2020
Graduate student colloquium (internal)  What's on the mind of air traffic controllers and algebraic geometers? (An introduction to jet spaces)	11 March 2020
Spectral sequence seminar (internal)  Differentially bigraded algebras and spectral sequence constructions	31 July 2019
Spectral sequence seminar (internal) Perfectly balanced: Using spectral sequences to balance Tor and Ext, and the Universal Coefficient Theorem	25 July 2019

## Service.

STAG: Students Teaching Algebraic Geometry discussion seminar

Co-organizer. Wrote syllabus/notes, gave talks, led problem-solving sessions.

Fall 2020-present

# Teaching Experience.

Calculus 1 instructor/coordinator	Summer 2020 (coord.), Summer 2019 (coord.), Summer 2018, Summer 2017.
Survey of Calculus instructor	Spring 2022, Summer 2021, Spring 2021.
College Algebra instructor	Fall 2021, Fall 2020, Spring 2020, Fall 2019, Spring 2019, Fall 2018, Spring 2018, Fall 2017.
Math Spot tutor	Since Fall 2016.
Calculus 1 teaching assistant	Spring 2017, Fall 2016.