

Kalila Joelle Sawyer

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EMPLOYMENT

Postdoctoral Teaching Fellow August 2020-Present
Colorado School of Mines, Colorado, USA

EDUCATION **University of Kentucky**, Kentucky, USA

Ph.D. in Mathematics May 2020
- Thesis Topic: Scollar Invariants on Tropical Chains of Loops
- Advisor: David Jensen
M.A. in Mathematics May 2017
University of Alaska Anchorage, Alaska, USA
B.S., Magna Cum Laude, in Mathematics May 2015

TEACHING

EXPERIENCE Colorado School of Mines

Primary Instructor

- MATH 111, Calculus I Fall 2020
- MATH 213, Calculus III Spring 2021
- MATH 301, Introduction to Analysis Spring 2021

University of Kentucky

Primary Instructor

- MA 111, Intro to Contemporary Math Fall 2019
- MA 109, College Algebra Summer 2019
- MA 201, Math for Elementary School Teachers Fall 2017

MathExcel Workshop Leader

- MA 114, Calculus II Spring 2019
- MA 113, Calculus I Fall 2018

Lead TA

- MA 123, Elementary Calculus and its Applications Spring 2018

Grader

- MA 661, Modern Algebra II Spring 2018

Recitation Leader

- MA 162, Finite Math and its Applications Spring 2017
- MA 137, Calculus I with Life Science Applications Fall 2016
- MA 123, Elementary Calculus and its Applications Spring 2016
- MA 113, Calculus I Fall 2015

Other

- Algebra Prelim Exam Review Session Leader Spring 2019
Spring 2018
- Undergraduate Peer Tutor August 2014-May 2015

PUBLICATIONS
AND
PREPRINTS

- 1 *Scrollar Invariants of Tropical Curves*
with D. Jensen, preprint arXiv:2001.02710.

HONORS AND
AWARDS

Project NExT Fellow	August 2021-2022
Wimberly C. Royster Outstanding Teaching Assistant Award	May 2018
Daniel R. Reedy Quality Achievement Award	August 2015–May 2017
Graduate Scholars in Mathematics Fellowship	August 2015-May 2017
Merit-Based Tuition Waivers	August 2013-May 2015

TALKS AND
PRESENTA-
TIONS

<i>Where Did You Come From, Where Did You Go: My Mathematical Life Story</i>	
Math Club, Colorado School of Mines	March 2021
<i>Life Isn't Fair, and Neither is Voting Theory</i>	
Graduate Student Colloquium, University of Kentucky	September 2019
<i>Calculating Tropical Scrollar Invariants on k-gonal Chains of Loops</i>	
Midwest Algebraic Geometry Graduate Conference	March 2019
<i>Scrollar Invariants are *Always* Fun</i>	
Algebra Seminar, University of Kentucky	December 2018
<i>Calculating Scrollar Invariants Via Young Tableaux (Poster)</i>	
AGNES	September 2018
<i>Stacks of Boxes are Better Than Chains of Loops</i>	
Graduate Student Colloquium, University of Kentucky	September 2018
<i>The Truth About Lie Groups</i>	
Topology Seminar, University of Kentucky	April 2018
<i>Setting Up Finite Geometry</i>	
Graduate Student Colloquium, University of Kentucky	March 2018
<i>The Maroni Invariant of Trigonal Chains of Loops (Qualifying Exam)</i>	
Algebra Seminar, University of Kentucky	February 2018
<i>The Grassmannian is Always Greener</i>	
Topology Seminar, University of Kentucky	October 2017
<i>Mathematicians Have Always Been...Interesting</i>	
Graduate Student Colloquium, University of Kentucky	September 2017
<i>Special Divisors on Marked Chains of Cycles (Master's Exam)</i>	
Algebra Seminar, University of Kentucky	April 2017
<i>Geometric Multiplicity and Geršgorin Discs</i>	
Graduate Student Colloquium, University of Kentucky	November 2015

SERVICE

Association for Women in Mathematics, Officer	July 2019-June 2020
Consortium for Mathematics and its Applications (COMAP)	
Interdisciplinary Contest in Modeling, Triage Judge	February 2019
UK Mathematics Graduate Student Council, Co-Chair	May 2017– May 2018
First Year Peer Mentor	August 2017-May 2019
Julia Robinson Mathematics Festival, Graduate Assistant	November 2017
Central Kentucky High School Math Circles,	
Graduate Assistant and Session Leader	September 2016-February 2019
UK High School Math Day for Women, Graduate Assistant	November 2015

CONFERENCES
AND
WORKSHOPS

BAD Math Day Fall 2020	
University of California, Davis [on Zoom]	November 2020
STAGOSAUR: Summer Tropical Algebraic Geometry Online Seminar	
Zoom	June-July 2020
ALCoVE: an Algebraic Combinatorics Virtual Expedition	
Zoom	June 2020
STEM Faculty Launch Workshop	
Worcester Polytechnic Institute, Massachusetts	October 2019
WARTHOG: Workshop on Algebra and Representation Theory Held on Oregonian Grounds	
University of Oregon, Eugene	July 2019
MSRI Summer School: Commutative Algebra and its Interaction with Algebraic Geometry	
University of Notre Dame, Indiana	June 2019
GATTACA: Georgia Tech Tropical, Arithmetic and Combinatorial Algebraic-geometry	
Georgia Tech, Atlanta	April 2019
SAGE Days 98: Women in Sage	
Archanes, Crete	April 2019
MAGGC: Midwest Algebraic Geometry Graduate Conference	
University of Illinois at Chicago	March 2019
KY-WV LSAMP Research Symposium	
Marshall University, Huntington, West Virginia	March 2019
AGNES: Algebraic Geometry Northeastern Series	
	Fall 2017, 2018
AMS Spring Central Sectional Meeting	
The Ohio State University, Columbus	March 2018
GAGS: The Georgia Algebraic Geometry Symposium	
Georgia Tech, Atlanta	February 2018
Mathfest 2017	
Chicago, Illinois	July 2017
KYMAA Annual Meeting	
	Spring 2016, 2017