Kalila Joelle Sawyer

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EDUCATION	**University of Kentucky**, Kentucky, USA	
	Ph.D. in Mathematics	May 2020
	- Thesis Topic: Scrollar 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

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	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 Presentations	*Life Isn't Fair, and Neither is Voting Theory*	
	Graduate Student Colloquium, University of Kentucky	September 2019
	Calculating Tropical Scrollar Invariants on k-gonal Chains of Loops	
	Midwest Algebraic Geometry Graduate Conference	March 2019
	Scrollar Invariants are *Always* Fun	
	Algebra Seminar, University of Kentucky	December 2018
	Calculating Scrollar Invariants Via Young Tableaux (Poster)	
	AGNES	September 2018
	Stacks of Boxes are Better Than Chains of Loops	
	Graduate Student Colloquium, University of Kentucky	September 2018
	The Truth About Lie Groups	
	Topology Seminar, University of Kentucky	April 2018
	Setting Up Finite Geometry	
	Graduate Student Colloquium, University of Kentucky	March 2018
	The Maroni Invariant of Trigonal Chains of Loops (Qualifying Exam)	
	Algebra Seminar, University of Kentucky	February 2018
	The Grassmannian is Always Greener	
	Topology Seminar, University of Kentucky	October 2017
	Mathematicians Have Always Been...Interesting	
	Graduate Student Colloquium, University of Kentucky	September 2017
	Special Divisors on Marked Chains of Cycles (Master's Exam)	
	Algebra Seminar, University of Kentucky	April 2017
	Geometric Multiplicity and Geršgorin Discs	
	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-Febuary 2019
	UK High School Math Day for Women, Graduate Assistant	November 2015

Conferences and Workshops	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

Memberships   **American Mathematical Society**
                       Association for Women in Mathematics
                       Mathematical Association of America