

# Andrew Lutz

## Curriculum Vitae

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### Contact Information

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University of Oklahoma  
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### Education

**Ph.D Candidate, Mathematics**  
University of Oklahoma (OU), Norman OK.

Expected Spring 2021

**Master of Arts, Mathematics**  
University of Oklahoma (OU), Norman OK.

Fall 2017

**Bachelor of Science, Mathematics**  
University of Texas at Tyler, Tyler TX.

Spring 2014

### Research Interests

**Riemannian Geometry.** Compact transformation groups, cohomogeneity one manifolds and biquotients, nonnegative curvature.

**RUME.** Research in Undergraduate Mathematics Education

### Awards and Honors

**Richard V. Andree Memorial Scholarship.** Spring 2020  
Nominated and awarded by the Department of Mathematics at the University of Oklahoma for academic excellence and department and university citizenship.

**Endorsement for Preparation for Teaching Undergraduate Mathematics.**

Spring 2019

Awarded by the mathematics department at the University of Oklahoma for completing several RUME courses and seminars focusing on various teaching strategies, philosophies and current research in undergraduate mathematics education.

**John Clark Brixey Sr., Graduate Math Scholarship.**

Spring 2018

Nominated and awarded by the Department of Mathematics at the University of Oklahoma for outstanding work as a Ph.D student.

### Publications

*Light Higgsino Dark Matter in the MSSM on D-branes* (with V. E. Mayes), Journal of Physics G: Nuclear Particle Physics, Vol. 42, No. 9 (2015).

**Teaching  
Experience**

**Graduate Assistant.** University of Oklahoma. Fall 2014-present  
Prepared and presented lectures, wrote and graded exams and quizzes, designed structure of grading system, assigned and graded homework problems.

**Instructor of Record:**

Accelerated Calculus III	Summer 2020
Business Calculus I	Fall 2019
Accelerated Calculus III	Summer 2019
College Algebra	Summer 2018
Precalculus/Trigonometry	Fall 2015
Precalculus/Trigonometry	Summer 2015
Precalculus/Trigonometry	Spring 2015
College Algebra	Fall 2014

**Discussion Leader:**

Accelerated Calculus II	Spring 2020
Accelerated Calculus II	Fall 2018
Accelerated Calculus II	Spring 2018
Accelerated Calculus II	Spring 2017
Accelerated Calculus I	Fall 2016
Calculus II	Spring 2016

**Grader:**

Senior Seminar	Spring 2019
Introduction to Topology	Spring 2019
Introduction to Abstract Algebra I	Fall 2017
Abstract Linear Algebra	Fall 2017
Linear Algebra	Summer 2017
Calculus IV	Spring 2016

**Math Center Tutor.** Fall 2014-Present  
Tutor various courses in the math center at OU including College Algebra, Precalculus/Trigonometry, Single and Multivariable Calculus, Business Calculus, Business Precalculus, and Linear Algebra.

**2019-2020 Graduate Teaching Academy Level 2.**

Center for Teaching Excellence, University of Oklahoma. Fall 2019  
The highest level of achievement; obtained by attending 20 hours of GTA workshops/seminars and had one classroom teaching observation. University of Oklahoma, Norman, OK.

**Teach College Mathematics Course.**

Department of Mathematics. University of Oklahoma, Norman, OK. Fall 2014

**Academic  
Service**

**Chair of Graduate Student Advocacy Committee.** Fall 2019-Spring 2020  
Served as chair of committee dedicated to improving grad student experience in math department at OU. Committee works directly with departmental leadership.

**Volunteer for Grad Student Panel for Prospective**

**Graduate Students.** Spring 2016-2020  
Volunteer to talk to prospective graduate students about life as a grad student at OU.

**Volunteer for the University of Oklahoma Math Day.** Fall 2016-2019  
 Helped supervise various activities for OU Math Day each fall. Duties included proc-  
 toring event exams, tending registration desk, etc.

<b>Talks Given</b>	<b>Introduction to Cohomogeneity One Manifolds and Codimension One Biquo- tient Foliations.</b>	Fall 2019
	Given in Graduate Student Geometry and Topology Seminar at OU.	
	<b>Reflection on Teaching Philosophy.</b>	Spring 2019
	Given in RUME Seminar at OU.	
	<b>MAA's Instructional Practices and AMATYC's recent IMPACT Docu- ment.</b>	Fall 2018
	Given in RUME Seminar at OU.	
	<b>Almost Isotropic Kähler Manifolds.</b>	Fall 2018
	Given in Geometry and Topology seminar at OU.	
	<b>Overview of Standards for the First Two Years of College Math.</b>	Fall 2018
	Given in RUME seminar at OU.	
	<b>MAA Suggested Instructional Practices to Foster Student Engagement.</b>	Fall 2018
	Given in RUME Seminar at OU.	
	<b>Discussions of Questions in the Classroom Article.</b>	Spring 2018
	Given in RUME Seminar at OU.	
<b>Conferences and Workshops</b>	<b>Symmetry and Geometry on the Southern Great Plains.</b>	Spring 2020
	University of Oklahoma, Norman, OK.	
	<b>Workshop on Curvature and Global Shape.</b>	Summer 2019
	University of Münster, Münster, Germany.	
	<b>Graduate Student Conference in Algebra, Geometry, and Topology.</b>	Summer 2019
	Temple University, Philadelphia, PA.	
	<b>Texas Geometry and Topology Conference.</b>	Spring 2019
	Texas Christian University, Fort Worth, TX.	
	<b>Topology Students Workshop.</b>	Summer 2018
	Georgia Tech, Atlanta, GA.	
	<b>Redbud Topology Conference.</b>	Spring 2018
	Oklahoma State University, Stillwater, OK.	
<b>Computer Skills</b>	$\text{\LaTeX}$ , WebWork, Gradescope, Zoom, Python, Mathematica.	