Elise A. Weir

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Education

Ph.D., Mathematics August 2018

University of Tennessee, Knoxville

Dissertation: "Dimension of the Restricted Hitchin Component for Triangle Groups"

Advisor: Morwen Thistlethwaite

B.S., Honors Mathematics, Summa Cum Laude

University of Tennessee, Knoxville

Honors thesis advisor: Grozdena Todorova

Employment

Visiting Assistant Professor July 2019 - July 2020

University of California, Santa Barbara

Postdoctoral Teaching Associate August 2018 - July 2019

University of Tennessee, Knoxville

Graduate Teaching Associate August 2014 - July 2018

University of Tennessee, Knoxville

HIM & Identity Technical Services

June 2013 - December 2013

Epic Systems, Verona, WI

Computer Skills

Coursework C, C++, MATLAB

Research Use Python, LATEX, Sage, Mathematica, GAP Vocational Use Intersystems Caché, Perl, Visual Basic

Professional Activities

2016-2017 Student teaching and academic mentor to a first year graduate student

Fall 2014 & 2015 Timer for UT/Pro2Serve Math Contest

2009-2011 Treasurer for UNC Chapel Hill Association for Women in Mathematics

Fall 2009 "Network the Event" Volunteer for Family Math Day at Morehead Planetarium

Awards and Honors

June 2018	Selected for participation in AMS Mathematics Research Community on Number
	Theoretic Methods in Hyperbolic Geometry
April 2018	Yueh-er, Hong-hsu and Clarence Cheng Kuo Fellowship for Academic Merit
Summer 2017	University of Tennessee Mathematics Department Summer Research Fellowship

References

- Morwen Thistlethwaite, Professor, University of Tennessee (mthistle@utk.edu)
- Marie Jameson, Assistant Professor, University of Tennessee (mjameso2@utk.edu)
- Luís Finotti, Associate Professor, University of Tennessee (lfinotti@utk.edu)
- Teaching: Joan Lind, Associate Professor, University of Tennessee (jlind@utk.edu)

Mathematics Qualifications

Research Interests

Representation Theory, Low-Dimensional Topology, and Hyperbolic Geometry

Publications

E. A. Weir, The dimension of the restricted Hitchin component for triangle groups, Ph.D. thesis, University of Tennessee, 2018.

Teaching Experience

Primary Instructor, UCSB Calculus I

Calculus III

Introduction to Proofs

Abstract Algebra (Group Theory)

Primary Instructor, UTK College Algebra - Fall 2014, Spring 2015, Summer 2015, Summer 2016

Basic/Business Calculus - Spring 2015

Calculus I - Fall 2016, Spring 2017, Fall 2017, Fall 2018

Calculus II - Spring 2018 Calculus II Honors - Fall 2018 Calculus III - Fall 2015, Spring 2016 Calculus III Honors - Spring 2019 Geometry (senior level) - Spring 2019

Primary Instructor, UNC Introduction to Mathematical Modeling

Topics in Mathematics for Non-Science Majors

Calculus I Calculus II

Conferences

November 2018	Texas Geometry and Topology Conference, Houston, TX
April 2018	Graduate Student Topology and Geometry Conference, Chicago, IL
June 2017	Graduate Student Conference in Algebra, Geometry, and Topology,
	Philadelphia, PA
April 2017	Graduate Student Topology and Geometry Conference, East Lansing, MI
March 2017	Southern Regional Algebra Conference, Mobile, AL
March 2017	MAA Southeastern Section Meeting, Macon, GA
May 2016	Graduate Student Conference in Algebra, Geometry, and Topology,
	Philadelphia, PA
April 2016	Graduate Student Topology and Geometry Conference, Bloomington, IN

Presentations

January 2019	Zariski dense surface subgroups in $SL(5,\mathbb{Z})$ and the restricted Hitchin component
	for triangle groups
	AMS Special Session on Number Theoretic Methods in Hyperbolic Geometry,
	Joint Mathematics Meetings, Baltimore, MD.
November 2018	The Hitchin component for triangle groups in $Sp(2m)$ & $SO(m, m + 1)$ (poster)
	Texas Geometry and Topology Conference, Rice University, Houston, TX.
November 2018	The dimension of the restricted Hitchin component for triangle groups (invited)
	Topology Seminar, University of California, Santa Barbara, CA.
April 2018	The dimension of the restricted Hitchin component for a triangle group
	Graduate Student Topology and Geometry Conference, Chicago, IL.
February 2018	The dimension of the restricted Hitchin component for a triangle group (invited)
	Topology Seminar, The Ohio State University, Columbus, OH.
December 2017	The dimension of the restricted Hitchin component for a triangle group
	Algebra Seminar, University of Tennessee, Knoxville, TN.
April 2016	Pseudomodular surfaces (expository)
	Geometry and Topology Seminar, University of Tennessee, Knoxville, TN.
November 2015	Complex hyperbolic geometry (expository)
	Geometry and Topology Seminar, University of Tennessee, Knoxville, TN.
April 2015	Faithfulness of the Burau representation of the braid group (expository)
	Algebra Seminar, University of Tennessee, Knoxville, TN.