

Erin Griffin

Department of Mathematics
114 Otto Miller Hall
Seattle Pacific University
Seattle, WA 98119

griffine@spu.edu
<https://sites.google.com/view/erin-griffin-math/>
(206) 281-2141

APPOINTMENTS

Seattle Pacific University Assistant Professor of Mathematics	September 2021-Present
---	------------------------

EDUCATION

Ph.D. Syracuse University , Mathematics Thesis Advisor: Will Wylie	August 2016 - May 2021
M.S. Syracuse University , Mathematics	August 2016 - December 2018
B.S. Cal Poly San Luis Obispo , Mathematics, Philosophy Minor	September 2012 - June 2016

AWARDS

Doctoral Prize (2021) *Syracuse University*, University recognition for superior achievement in completed dissertations,
Kibbey Prize (2021) *Syracuse University*, Departmental award for outstanding achievement in the PhD program.
Outstanding TA Award (2020) *Syracuse University*, University wide award presented to 4% of TAs annually.
AWM Poster Session Winner (2021) *Joint Mathematics Meeting*, Award presented to two graduate students for the AWM national graduate student poster session.
NSF Grant Research Assistanship (2018-2020) *Syracuse University*, One of two students to receive summer funding under Prof. Will Wylie's NSF research grant.

RESEARCH

Interests

Riemannian Geometry and Geometric Analysis. Particularly geometric flows, their solitons, and the relation of both to conformal geometry. My recent work has focused on the ambient obstruction flow and Bach flow.

Papers

"Gradient Ambient Obstruction Solitons on Homogeneous Manifolds."
Ann Glob Anal Geom (2021). <https://doi.org/10.1007/s10455-021-09784-3>

Talks

Research

Mathematical Congress of the Americas, special session on "Group actions in Riemannian geometry" Poster Presentation: "Gradient Ambient Obstruction Solitons on Homogeneous Manifolds."	July 12-24, 2021
Online Topology Geometry Seminar: "Homogeneous Gradient Ambient Obstruction Solitons."	March 31, 2021
AMS Special Session, Recent developments in Differential Geometry: "Gradient Ambient Obstruction Solitons on Homogeneous Manifolds."	March 21, 2021
Joint Mathematics Meeting, AWM Workshop: Poster Presentations by Women Graduate Students	January 8, 2021
Syracuse Geometry and Topology Seminar, "Homogeneous Gradient Solitons of the Ambient Obstruction Flow"	July 3, 2020
45th ANYSRGMC, "Gradient Bach Solitons on 4-dimensional Homogeneous Manifolds"	March 28, 2020
Math For All Conference in New Orleans, "Gradient Bach Solitons on 4-dimensional Homogeneous Manifolds"	March 7, 2020

Expository

Mathematics Continued Conference at University of Connecticut, “Eating Pizza Like a Geometer”	November 9, 2019
Worcester Polytechnic Institution Graduate Seminar, “The Volume Comparison Theorem”	November 8, 2019
Syracuse University Math Graduate Organization Seminar, “The Volume Comparison Theorem”	November 1, 2019
44th ANYSRGMC, “A brief look at the Volume Comparison Theorem”	March 23, 2018
Syracuse Geometry and Topology Graduate Seminar, “Volume Comparison Theorem”	November 7, 2018
Syracuse University Math Graduate Organization Colloquium, “Eating Pizza Like a Geometer”	October 19, 2018
42nd ANYSRGMC, “Isometric Immersion of Euclidean Plane in Hyperbolic Space”	April 8, 2017

EMPLOYMENTResearch Assistant *Syracuse University*

Summer 2018- Summer 2020

Three Summer Semesters. Supported by Prof. Will Wylie’s NSF research grant NSF-#1654034.

Teaching Mentor *Syracuse University*

May 2020 - May 2021

Created hour-long interactive seminar on developing strategies to motivate students; managed small group of incoming teaching assistants (TAs) during University TA Orientation; facilitated discussions to increase understanding of seminars and find practical ways to implement that knowledge; provided constructive feedback on students’ submitted miniature lectures to improve their teaching and equip them with skills to be successful.

Academic Excellence Workshop Curriculum Developer *Syracuse University*

Trained and supervised approximately 50 undergraduate workshop facilitators, ensuring they understood the material well, could teach concepts effectively, and were able manage a classroom; developed and maintained worksheets for the workshop participants; coordinated with course instructors to ensure the worksheets are on track with the course. Transitioned program online for Fall 2020 semester, holding curriculum development meetings virtually and training the facilitators to effectively use technology in their workshops.

• Math 193/194 Precalculus	Fall 2019 - Spring 2021
• Math 295 Calculus I	Fall 2019 - Spring 2021
• Math 296 Calculus II	Fall 2019 - Spring 2021
• Math 331 First Course in Linear Algebra	Spring 2021
• Math 397 Calculus III	Fall 2019 - Spring 2021
• Math 485 Differential Equations and Matrix Algebra for Engineers	Spring 2020 - Spring 2021

Instructor of Record *Syracuse University*

Gave original lectures; created midterms, quizzes, and worksheets; assigned final grades.

• Math 285 Calculus for the Life Sciences I (Online)	Fall 2020
• Math 285 Calculus for the Life Sciences I	Fall 2019
• Math 286 Calculus for the Life Sciences II	Spring 2019
• Math 285 Calculus for the Life Sciences I	Fall 2018
• Math 285 Calculus for the Life Sciences I	Spring 2018
• Math 121 Statistics for the Liberal Arts	Summer 2017

Teaching Assistant

Administered and graded weekly quizzes, graded exams.

• Math 295 Calculus I	Fall 2017
• Math 284 Business Calculus	Spring 2017
• Math 121 Statistics for the Liberal Arts	Fall 2016

SERVICE

Conference Organizer

Organizer, 45th Annual New York State Regional Graduate Mathematics Conference (ANYSRGMC) 2019 - 2020

Organized the longest running graduate student mathematics conference in the United States. Managed NSF conference grant and additional funding from AMS and the Graduate Student Organization. Delegated travel funding to participants. Orchestrated our first ever undergraduate poster session during the conference. (This conference was moved online due to COVID-19.)

Successfully transitioned the conference online within three weeks of the conference date, making it the nation's first entirely remote graduate student conference. The conference included keynote addresses, parallel sessions, and a poster session. Facilitated participant travel reimbursement in spite of cancelled travel.

Co-Organizer, 43rd ANYSRGMC and 44th ANYSRGMC 2017 - 2019

Help with various tasks relating to running a conference including: coordinating catering, helping with registration, and preparing conference materials.

Math Graduate Organization

President 2019 - 2020

Responsible for managing the budget and applying for funding. Organized events for graduate students, including the departmental picnic. Served as graduate student representative to department focused on advocating for graduate student needs.

Vice President 2020 - 2021

Mentored current president through navigating the planning the 46th ANYSRGMC. Responsible for managing the budget; applying for funding; organizing the 45th ANYSRGMC;

Treasurer 2017 - 2019

Apply for funding for various events throughout the year; help maintain budget; co-organized the ANYSRGMC.

Association for Women in Mathematics, Syracuse University Chapter

Vice President 2019 - 2020

Helped plan and apply for funding for various events to promote community and uplift minorities in mathematics; advertised events throughout the department.

Secretary 2018 - 2019

Founding board member of Syracuse University AWM Chapter; helped plan events for academic year.

Contributed Talk Session Moderator

Math for All Conference, Tulane University 2020

43rd ANYSRGMC, Syracuse University 2018

Prospective Student Coordinator

2017 - 2021

Act as the graduate representative for prospective students; answer questions via emails; plan events with other graduate students during prospective student visits; help plan and lead prospective student weekend.

First Year Help Session Leader

2017 - 2018

Lead first year students through old preliminary exam problems to prepare the students for their exams. Secured funding and helped organize sessions.

FUNDING AND CERTIFICATES

Travel Funding

- 2021 **Mathematical Congress of the Americas Travel Grant**, *American Mathematical Society*, Funding to present poster at conference.
- Joint Mathematics Meeting**, *Association for Women in Mathematics*, Selected as presenter and received grant to attend conference.
- 2020 **Math for All Travel Funding**, *Tulane University*, Partial funding to speak at conference
- GSO Travel Grant**, *Syracuse University*, Graduate Student Organization grant to attend conference
- 2019 **Mathematics Continued Conference**, *University of Connecticut*, Funding to travel to conference
- Northeast Analysis Network**, *University of Connecticut*, Funding to travel to conference
- Women and Mathematics Conference**, *Institute for Advance Study*, Selected as participant and received grant to attend WAM Conference.
- RTG Conference on Geometric Analysis and Diversity in Mathematics**, *Princeton University*, Grant to attend conference.

Certificates

- 2020 **Women in Science and Engineering Future Professionals Program Certificate**
- 2021 **Certificate in Undergraduate Teaching**

CONFERENCES ATTENDED

Mathematical Congress of the Americas	July 12-24, 2021
Workshop on Mathematics and Social Justice, MSRI	June 9-18, 2021
Joint Mathematics Meeting	January 6-9, 2021
45th ANYSRGMC, Syracuse University	March 28, 2020
Math for All, Tulane University	March 6-7, 2020
Joint Mathematics Meeting	January 15-18, 2020
Mathematics Continued Conference, University of Connecticut	November 9, 2019
Northeast Analysis Network, University of Connecticut	September 21- 22, 2019
RTG Conference on Geometric Analysis and Diversity in Mathematics, Princeton University	June 19-22, 2019
Women and Mathematics Conference, Institute for Advanced Study	May 18- 24, 2019
44th ANYSRGMC, Syracuse University	March 23, 2019
Geometric Analysis Conference at Rutgers University, Rutgers University	November 14-16, 2018
43rd ANYSRGMC, Syracuse University	March 24, 2018
Mini School on Mean Curvature and Ricci Flow, Fields Institute	November 4-5, 2017
Temple University Graduate Student Conference in Algebra, Geometry, and Topology, Temple University	June 3-4, 2017
42nd ANYSRGMC, Syracuse University	April 8, 2017

PROFESSIONAL MEMBERSHIPS

- Association for Women in Mathematics 2015-Present
- American Mathematical Society 2017- Present
- Mathematical Association of America 2017- Present

REFERENCES

Prof. William Wylie
Department of Mathematics
215 Carnegie Building
Syracuse University
Syracuse, NY 13244
wwylie@syr.edu

Prof. Peter Petersen
520 Portola Pl
Math -Sciences UCLA
Los Angeles, CA 90095
petersen@math.ucla.edu

Prof. Graham Leuschke
Department of Mathematics
215 Carnegie Building
Syracuse University
Syracuse, NY 13244
gjeusch@syr.edu

Prof. Loredana Lanzani
Department of Mathematics
215 Carnegie Building
Syracuse University
Syracuse, NY 13244
llanzani@syr.edu

Prof. Moira McDermott (Teaching & AEW)
Department of Mathematics
215 Carnegie Building
Syracuse University
Syracuse, NY 13244
momcderm@syr.edu

Prof. Duane Graysay (Teaching)
Department of Mathematics
215 Carnegie Building
Syracuse University
Syracuse, NY 13244
dtgraysa@syr.edu