

Matthew H. Hamil

☎ +1 (678) 471 9762 • ✉ matthewhamil@protonmail.com

Education

University of Georgia <i>B.S. in Mathematics</i>	Athens, GA 2016–2019
University of Georgia <i>M.A. in Mathematics</i> Advisors: Brian Boe and Arik Wilbert; Thesis: <i>On parabolic Kazhdan–Lusztig polynomials</i>	Athens, GA 2019–2020
University of Georgia <i>Ph.D. in Mathematics</i> Advisor: Daniel K. Nakano; Thesis: <i>On localizing subcategories of Lie superalgebra representations</i>	Athens, GA 2020–2025

Research

Research in Combinatorial Representation Theory <i>University of Georgia</i> Working with Arik Wilbert to give a diagrammatic description of type $A_n, A_{n-k} \times A_k$ parabolic Kazhdan–Lusztig polynomials. Master’s thesis.	2020–2021
Doctoral Research in Algebra <i>University of Georgia</i> Working with Daniel K. Nakano on problems in the representation theory of Lie superalgebras.	2021–2025

Papers and Preprints

<i>The Homological Spectrum and Nilpotence Theorems for Lie Superalgebra Representations</i> joint with Daniel K. Nakano. Provisionally accepted in <i>Journal of Algebra</i> . arXiv:2404.04457	July 2024
<i>On localizing subcategories of Lie superalgebra representations</i> Submitted. arXiv:2503.13639	May 2025

Research Talks

13th Southeastern Lie Theory Workshop <i>Stratifying rings for the stable category of modules over detecting Lie subalgebras.</i> North Carolina State University	Raleigh, NC May 2023
AMS Fall Southeastern Sectional Meeting <i>Nilpotence theorems via homological residue fields for Lie superalgebra representations</i> University of South Alabama	Mobile, AL October 2023
University of Georgia Algebra Seminar <i>A nilpotence theorem via homological residue fields for Lie superalgebra representations</i> University of Georgia	Athens, GA November 2023
14th Southeastern Lie Theory Workshop <i>Homological spectrum and nilpotence theorems for Lie superalgebra representations</i> University of Virginia	Charlottesville, VA March 2024
AMS Spring Western Sectional Meeting <i>The homological spectrum and nilpotence theorems for Lie superalgebra representations</i>	San Francisco, CA May 2024

San Francisco State University

Joint Mathematics Meeting

Classifying localizing subcategories of Lie superalgebra representations
Seattle Convention Center

Seattle, WA

January 2025

15th Southeastern Lie Theory Workshop

Localizing subcategories of Lie superalgebra representations in Type A
College of Charleston

Charleston, SC

May 2025

Conferences Attended

AMS Spring Southeastern Sectional Meeting

Georgia Institute of Technology

Atlanta, GA

March 2023

Service

Mathematics Department Graduate Student Orientation

University of Georgia
Organizer, speaker

Athens, GA

August 2022, 2023, 2024

Representation Theory and Related Geometry: Progress and Prospects

University of Georgia
Local organizer

Athens, GA

May 2024

Teaching

University of Georgia

MATH 1113: Precalculus
Instructor of Record. 5 sections

Athens, GA

2021-2024

University of Georgia

MATH 2250: Calculus I for Science and Engineering
Instructor of Record. 2 sections

Athens, GA

2021-2024

University of Georgia

MATH 2250E: Calculus I for Science and Engineering
Instructor of Record. 1 section. Online.

Athens, GA

Summer 2024

University of Georgia

MATH 2260: Calculus II for Science and Engineering
Instructor of Record. 1 section.

Athens, GA

2025

Distinctions

University of Georgia

Hollingsworth Award

Departmental awards for the top performing student in Introduction to Higher Mathematics.

Athens, GA

2016-2017

University of Georgia

Charles M. Strahan Award

Awarded annually by the department for outstanding junior mathematics majors.

Athens, GA

2019

Employment

Five Points Prep

Mathematics and English Tutor

Watkinsville, Georgia

2018-2019

University of Georgia

Graduate Teaching Assistant

Athens, Georgia

2020-Present

Skills

Programming languages: Basic familiarity with Java, GAP, Python, L^AT_EX, and HTML/CSS.

Other: Proficient in Portuguese.