

Matthew H. Hamil, Ph.D.

Contact Information	Boyd GRSC Department of Mathematics University of Georgia Athens, GA 30602 USA	Phone: +1 (678) 471-9762 E-mail: mhh14981@uga.edu Office: Boyd 434F
Research Interests	Tensor triangulated categories, tensor triangular geometry, and applications to the representation theory of Lie algebras, Lie superalgebras, algebraic groups, and finite groups.	
Employment	J.J. Sylvester Assistant Professor of Mathematics	2025-2026
	<ul style="list-style-type: none">• Department of Mathematics, Johns Hopkins University, Baltimore, MD.• Postdoctoral mentor: TBD	
	Graduate Teaching Assistant	2020-2025
	<ul style="list-style-type: none">• Department of Mathematics, University of Georgia, Athens, GA.	
Education	Doctor of Philosophy (Ph.D.) in Mathematics	May 2025
	<ul style="list-style-type: none">• University of Georgia• Advisor: Daniel K. Nakano• Dissertation title: <i>On localizing subcategories of Lie superalgebra representations</i>	
	Master of Arts (M.A.) in Mathematics	July 2020
	<ul style="list-style-type: none">• University of Georgia• Advisors: Brian Boe and Arik Wilbert• Thesis title: <i>On parabolic Kazhdan–Lusztig polynomials</i>	
	Bachelor of Science (B.S.) in Mathematics	December 2019
	<ul style="list-style-type: none">• University of Georgia• Graduated Cum Laude	
Papers and Preprints	On localizing subcategories of Lie superalgebra representations, submitted, <i>Adv. Math.</i> (2025), 15 pages, arXiv:2503.13639 .	
	The homological spectrum and nilpotence theorems for Lie superalgebra representations (with D. Nakano), provisionally accepted in <i>J. Algebra</i> (2024), 25 pages, arXiv:2404.04457	
Research Talks	15th Southeastern Lie Theory Workshop, College of Charleston, Charleston, SC. <i>Localizing subcategories of Lie superalgebra representations in Type A.</i>	May 2025
	Topology Seminar, Department of Mathematics, Johns Hopkins University, Baltimore, MD. <i>Localizing subcategories of Lie superalgebra representations.</i>	April 2025
	Joint Mathematics Meetings, Seattle Convention Center, Seattle, WA. <i>Classifying localizing subcategories of Lie superalgebra representations.</i>	January 2025
	AMS Spring Western Sectional Meeting, San Francisco State University, San Francisco, CA. <i>The homological spectrum and nilpotence theorems for Lie superalgebra representations.</i>	May 2024

	14th Southeastern Lie Theory Workshop, University of Virginia, Charlottesville, VA. <i>The homological spectrum via nilpotence theorems for Lie superalgebra representations.</i>	March 2024
	Algebra Seminar, Department of Mathematics, University of Georgia, Athens, GA. <i>A nilpotence theorem via homological residue fields for Lie superalgebra representations.</i>	November 2023
	AMS Fall Southeastern Sectional Meeting, University of South Alabama, Mobile, AL. <i>Nilpotence theorems via homological residue fields for Lie superalgebra representations.</i>	October 2023
	13th Southeastern Lie Theory Workshop, North Carolina State University, Raleigh, NC. <i>Stratifying the stable category of modules over detecting Lie subalgebras.</i>	May 2023
Conferences Attended	Advances in Lie Theory, Representation Theory, and Combinatorics: Inspired by the work of Georgia Benkart, Simons Laufer Mathematical Sciences Institute, Berkeley, CA.	May 2024
	AMS Spring Southeastern Sectional Meeting, Georgia Institute of Technology, Atlanta, GA.	March 2023
Teaching	University of Georgia:	
	MATH 2260: Calculus II for Science and Engineering. Instructor of Record (1 section)	Spring 2025
	MATH 2250: Calculus I for Science and Engineering. Instructor of Record (1 section).	Fall 2024
	MATH 2250E: Calculus I for Science and Engineering. Instructor of Record (1 section, online).	Summer 2024
	MATH 1113: Precalculus. Instructor of Record (2 sections).	Spring 2024
	MATH 2250: Calculus I for Science and Engineering. Instructor of Record (1 section).	Fall 2023
	MATH 1113: Precalculus. Instructor of Record (2 sections).	Spring 2023
	MATH 1113: Precalculus. Instructor of Record (1 section).	Fall 2022
Service	Conferences organized:	
	Representation Theory and Related Geometry, Progress and Prospects, University of Georgia, Athens, GA. Local organizer.	May 2024
	Miscellaneous:	
	University of Georgia Department of Mathematics Graduate Student Orientation. Organizer, speaker.	August 2022, 2023, 2024
Honors and Awards	William Armor Wills Memorial Scholarship Award	May 2025
	<ul style="list-style-type: none"> • University of Georgia, Department of Mathematics, Athens, GA. • Awarded annually for excellence in research. 	

Charles M. Strahan Award

December 2019

- Awarded annually to the top junior mathematics major.
- University of Georgia, Department of Mathematics, Athens, GA.

Skills

Programming:

- Python, Java, L^AT_EX, HTML, CSS

Languages:

- English (Native)
- Portuguese (Limited working proficiency)