

Latinxs and Hispanics in Mathematical Sciences



Photo courtesy of SLMATH and taken by Amira Maxwell

"Hispanic Heritage Month is a time to reflect and celebrate the excellent and incredible accomplishments of people, who share similar experiences and backgrounds as me, despite the systemic barriers that society has put in place."

Dr. Sofía Martínez Alberga

Assistant Professor

Instituto Tecnológico Autónomo de México

Dr. Sofía Martínez Alberga is an Assistant Professor at Instituto Tecnológico Autónomo de México (ITAM), in Mexico City. She earned her Bachelor of Science in mathematics from the University of California, Riverside (UCR) in 2019, and her Master of Science and Doctorate in mathematics at Purdue University, in 2023 and 2025, respectively.

Originally born and raised in southern California, Sofia grew up in a home with strong Panamanian and Spanish influence, while the ambient culture was Mexican: a beautiful mix in her opinion. After seventeen years of living in this blended culture she stayed in her hometown and attended UCR. There she worked at the Academic Resource Center, was President of the College of Natural & Agricultural Sciences Science Ambassador program, was Treasurer of the Association for Women in Mathematics (AWM) Chapter, and an Advancement Ambassador. She kept her name on both the Chancellor's and Dean's honors list and won the Academic Excellence Award for the mathematics department and the Bryce Mason Award.

Off campus UCR's campus, Sofia spent the last summer before graduating doing research at the Fields Institute at the University of Toronto in Canada in the area of algebraic combinatorics, and this is where her journey in research began. Before attending Purdue University, she won the NSF Graduate Research Fellowship and participated in the Enhancing Diversity in Graduate Education (EDGE) program. Due to her involvement in the latter program, she has had the pleasure of being a mentor of the 2022 cohort of EDGE participants and organizing sessions at the Joint Mathematics Meetings in the "EDGE" name.

Sofia entered Purdue as a Math Alliance Fellow and knew that graduate school in the Midwest was going to be an entirely different challenge than anything she had experienced prior, but she also knew that did not have to change who she was and what she stood for. So, outside of her studies, served as a Graduate Student Representative for the math department allowing her to cultivate community amongst math graduate student. Later, she was President and Treasurer of Purdue's AWM Chapter and her work helped earned the chapter national recognition by the larger AWM organization for Professional Development. During her time at Purdue, Sofia explored many research avenues until she ultimately decided to work in the area of algebraic topology with her advisor Dr. Manuel Rivera. In order to learn more niche concepts of the area and build community with fellow graduate students, she organized Purdue's student topology seminar for four years and as a result she perfected her presentation skills and has given research talks all over the word. By the end of her time at Purdue, she was awarded the 2022 Purdue Department of Mathematics Service Award, the 2024 Purdue Graduate School Outstanding Mentoring Award, and the 2024-2025 Bilsland Dissertation Fellowship.

Lathisms was founded in 2016 in order to showcase the contributions of Latinx and Hispanic mathematicians during Hispanic Heritage Month, which is celebrated in the United States from September 15 and October 15 every year. During this time, we feature/reveal a prominent Latinx/Hispanic mathematician daily. See all the featured mathematical scientists at LATHISMS.ORG.

Thanks to the American Mathematical Society and the Mathematical Association of America for support of Lathisms.