

# Latinxs and Hispanics in Mathematical Sciences



Photo courtesy of UMN Math Dept

## Emily López

Ph.D. Student

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Emily López was born and raised in Southern California. Her parents instilled values that would guide her as a Chicana, first-generation college student. Her dad, who went from picking green onions in the fields as a kid to eventually opening his small engine repair shop, taught her that with a strong work ethic, anything is possible. Her mom, who primarily raised her and her older brother at home, taught her that meaning and purpose can be found by using your heart as a compass. She soon discovered her heart would bring her to mathematics. Despite having previous instructors doubt her capabilities, her high school Algebra II/Trig teacher, Mrs. Arnold, invited her to the subject, illustrating that math is all around us. Since then, Emily has been enamored by the elegance of mathematics in creating the language of abstraction for real-life phenomena.

Emily received her B.S. in Mathematics from the College of Creative Studies at UC Santa Barbara (UCSB) in 2022, where she took advantage of the synergistic research opportunities at her university. As an undergrad, she was selected as a McNair Scholar, a nationwide program aimed at increasing the number of first-generation, low-income, and/or underrepresented students in Ph.D. Programs. After studying optimal transport with applications in machine learning under Professor Katy Craig, Emily aspires to become an applied mathematician at a national research lab or university. She is currently a second-year Ph.D. student at the University of Minnesota Twin Cities Math Department, where she is a NSF Graduate Research Fellow.

Emily is interested in the interplay between analysis, probability, and statistics in developing efficient machine learning and scientific computing algorithms. To her, one of the joys of studying mathematics is sharing it with others, and she is dedicated to helping other students, especially those from underserved backgrounds, to realize their potential. Returning back to the program that introduced her to academic research, Emily served as 2021 student coordinator for the Summer Institute in Mathematics and Science, a 3-week academic preparation and research program for incoming first-year students intending to enroll at UCSB directly from high school. She received the Thomas More Storke Award for Excellence, UCSB's highest honor, for her outstanding scholarship and extraordinary service to the university, its students, and its community.

Building community remains one of Emily's core values. She is a co-founder of the Enhancing Diversity in Graduate Education (EDGE) Webinar Series, which aims to connect graduate students with an inspiring network of professionals and facilitate collaborations among graduate researchers and job sectors seeking mathematical talent. She also enjoys working with undergraduates through the Mathematics Projects at Minnesota, a week-long program that empowers underrepresented groups in mathematics through mentoring, connecting students with opportunities and resources, and building community.

*"As an undergraduate, I would be inspired by the Lathisms spotlights, reading how others overcame barriers and were thriving in the field. I feel that Hispanic Heritage Month is a time to celebrate the resilience, richness, and diversity of our culture. Every year, we are reminded of how far we have come and what work remains to be done to make mathematics more accessible and inclusive for everyone."*

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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](https://LATHISMS.ORG).

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