

Latinxs and Hispanics in Mathematical Sciences



Photo courtesy of Dr. Elaina Aceves

Dr. Elaina Aceves

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"Hispanic Heritage Month is a time to reflect and give thanks for the sacrifices my grandparents made to help their family. After work, my grandma taught me long division on sticky notes at the kitchen table. My grandfather never learned how to read and taught himself to speak English. My grandfather's hands were rough and one of his fingers was permanently crooked from being broken while working with farm equipment. Now I can do my part by teaching thousands of students mathematics and hopefully create a more prosperous Hispanic community for generations to come."

Dr. Elaina Aceves was raised in Tulare, California in the heart of the San Joaquin Valley, where her grandparents both had worked in the fields to provide for their families. Her family members constantly encouraged her to do well in school and get a college degree, but she didn't know which major until she took a calculus class at Fresno State. As a half-Hispanic female with above average grades, she was fortunate to qualify for multiple merit-based and ethnicity-based opportunities at the collegiate level. She received a B.A. and M.A. in Mathematics from Fresno State, where she was a President's Honors Scholarship and Graduate Equity Fellowship recipient. While taking classes and doing research in knot theory, Elaina experienced teaching mathematics for the first time and saw how much of an impact she could have with her students. With that, an educator was born. Elaina earned an M.S. and Ph.D. in Mathematics thanks to a GAANN Fellowship, an Alfred P. Sloan Scholarship, and the Ford Foundation Predoctoral Fellowship. Not solely focused on research, Elaina also completed the Certificate in Online Teaching and the Graduate Certificate in College Teaching. While learning about different teaching strategies and frameworks, she continued to teach at the University of Iowa. Upon graduation, she was hired as a post-doc at the University of Utah and was able to mentor graduate students in their teaching methods. Since then, Elaina has worked at College of the Sequoias and now has a tenure-track position at San Joaquin Delta College as an Associate Professor. Throughout her career, she has volunteered her time with events like Sonia Kovalevsky Day and projects like directed reading programs and math clubs.

Elaina's research is focused in knot theory, specifically working with mathematical braids, although she has published a paper in both graph theory and geometry. Her current research project is cross discipline, which connects algebraic combinatorics with the Artin braid group by studying row motion, toggle group maps, and the orbits of families of braids.

Elaina's dedication to teaching is shown in her educational training and commitment to her students. As someone who was once told by a teacher that she shouldn't go into STEM because she wouldn't be smart enough to handle it, she makes sure that no student ever feels that way in her classroom. She primarily focuses on fostering engaging learning experiences and collaborative environments that support diverse learners. Her first priority is always her students as she works to make her classes accessible. She strives to make the resources she uses in class freely provided so that no student misses out on the opportunities to learn in the class. Elaina currently teaches at San Joaquin Delta College, a community college with a majority of Hispanic students. Also, nearly half of Delta students are the first in their families to pursue higher education. She knows that her students come from diverse backgrounds and are usually under-prepared for the mathematics classes at the collegiate level. To overcome this challenge, she focuses on providing instruction dedicated to building a stronger foundation in the fundamentals of mathematics.

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.