

Latinxs and Hispanics in Mathematical Sciences



Guadalupe Inés Lozano

Guadalupe Lozano grew up in Argentina. She was born to first-generation medical doctors of European descent. Her father, a gregarious orthopedic surgeon, guitar, and piano aficionado, was killed in a car accident when Guadalupe was a child. His heritage was Asturian and Galician; Guadalupe strongly identifies with the Celtic culture of Northern Spain. Her mother, a retired biology professor, was a child of Italian and Swiss-Italian immigrants and an implicit role model in Guadalupe's choice to pursue an academic career. Guadalupe completed a science and math-intensive high school education in Argentina, followed by initial university studies in economics and accounting. In spite of a strong desire to expand her educational horizons beyond science, Guadalupe soon refocused her career choice on mathematics. She returned to the U.S.—where she had been an exchange student during high school—and completed a B.S. in mathematics at Whitworth University, followed by an M.S. and a Ph.D. in mathematics at the University of Arizona. Guadalupe's passion for unveiling geometric structures in dynamical systems competed strongly with her growing interest in educational epistemology, pedagogical innovation, and conceptual learning. After postdoctoral fellowships at the University of Michigan and the University of New Mexico, Guadalupe returned to Arizona and focused her research on quantitative models for measuring mathematical knowledge, both at the K-12 and university levels, particularly calculus. She also spearheaded mechanisms for making mathematics research outwards facing and cultivating public advocacy for mathematical sciences. Today, Guadalupe works to broker transformation at a rapidly-evolving boundary: the intersectional space between historically minoritized populations and U.S. university education, particularly in STEM. Guadalupe serves as Director for the Center for University of Education Scholarship (CUES) under the Office of the Provost, and is a co-Founder of the STEM in HSI (Hispanic Serving Institutions) Working Group at the University of Arizona.

Guadalupe's non-traditional trajectory in academia—her formal training as a mathematician, her research in mathematics education, and various university-level roles—has led her to develop a disruptive boundary-crossing know-how for critical contributions at the intersection of research and service, broadly understood.

"Hispanic Heritage month marks a dedicated time to reflect upon who we are as Hispanic and Latinx people in a culture that both helps define us and has the potential to blend our unique identities with those others in new ways. By illustrating quite concretely how Hispanics and Latinxs are contributing to our US culture, our academic institutions, our public knowledge, and our ever-changing ways of life, we embrace the opportunity to preserve our identity and our legacy in a context of growth and enrichment for both present and future generations in the land we live in."

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.

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