

Latinxs and Hispanics in Mathematical Sciences



Photo courtesy of Virginia Tech's College of Science

Dr. Jorge Reyes

Assistant Professor
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"To me, Hispanic Heritage Month is a time to celebrate our accomplishments together, to show that we can not only 'work hard,' but 'work smart,' and that our heritage is a source of strength. I didn't know many Guatemalans growing up, but under the umbrella of Latino/a and Hispanic, we can come together through our shared culture and history. It's also a time to be thankful and acknowledge the sacrifices of those who came before us. I know I would not be where I am today without the unconditional support of my parents."

Jorge Reyes was born in Los Angeles to Guatemalan parents and grew up in Glendale until age 10. He and his family then moved to Las Vegas, where he finished high school and developed an affinity for science and in particular mathematics, not because of an underlying passion or innate talent, but because it provided a sense of security while he struggled with other subjects. He initially planned to attend Norwich University to study mathematics and become a Marine Corps officer. However, as is the story for many first-generation college students and children of immigrants, financial realities led him to stay home and enroll at the local community college, the College of Southern Nevada (CSN). Jorge quickly dual enrolled, taking cheaper transferable classes at CSN and upper-level classes at the University of Nevada, Las Vegas (UNLV), eventually graduating from CSN with an Associate of General Studies and from UNLV with a B.S. in Mathematics. Two months later, his son, Jorge III, was born. Wanting to remain close to family, he stayed at UNLV for graduate school, earning an M.S. in Applied Mathematics before switching to Computational Mathematics for his Ph.D. under the advisement of Monika Neda. It was here that Jorge really expanded his horizons, getting on a plane for the first time to attend a conference, publishing his first papers, collaborating on research, and becoming involved in his community by co-founding UNLV's SIAM student chapter with the help of his friends. After graduating, he began a three year postdoctoral position at Virginia Tech under the mentorship of Traian Iliescu, opening up new research avenues and growing as a scholar. After surviving a harrowing job market, Jorge is just starting his first year as an Assistant Professor at Texas State University in San Marcos.

Broadly speaking, Jorge's research revolves around numerical analysis, primarily in the study of computational fluid dynamics. These studies include the derivation of energy (in)equalities, stability of the model's numerical solutions, error estimates, conservation of different quantities of interest (QOIs), and simulations of benchmark fluid flow problems. Currently, Jorge's research focus is on the development of data-driven methods for fluids..

Beyond research, Jorge cares about teaching and mentoring, having completed multiple certification programs at UNLV, such as the Culturally Relevant & Responsive Teaching (CRRT) Fellowship, as well as mentoring and tutoring for TRIO and McNair. As a student, he "checked all the boxes" that can cause universities to worry: first-generation, historically underrepresented, a Pell Grant recipient, and a parent. Representation matters to students; if they cannot identify with those who have achieved success, they tend to have a harder time achieving it themselves. Jorge has also been awarded an AMS-Simons Travel Grant and the SIAM Postdoc Support Grant, and is currently a MGB-SIAM Early Career Fellow. He was also the second Hispanic student to be awarded a mathematics Ph.D. from UNLV and is believed to be the first computational mathematics Ph.D. from the state of Nevada.

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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