Latinxs and Hispanics in Mathematical Sciences



Photo courtesy of Michigan State University

"While I was working as a line cook with other Latinos, I did not realize then how strong, loving and hard-working our community is. Although many universities have Latino communities that one can be a part of, I have mainly interacted with immigrant Latino communities and the pain that they have felt over the years. To me, Hispanic Heritage Month reminds me of how many of us migrate for a better life and how much of a toll that takes on us, like missing family. It reminds me of my community that helped me become a mathematician."

Aldo García Guinto

Teaching/Research Assistant Michigan State University

Aldo Garcia Guinto was born in Tijuana, Mexico and migrated to the United States at the age of 9 with his family. While in high school, he obtained a working permit thanks to DACA, for which he has been a part of since. As a DACA recipient, Aldo was afraid of applying for scholarships or loans, believing that he was not eligible for them. He thought that the situation was not well known by others, so he had to figure it out on his own. In 2013, Aldo decided to go to community college and was informed about the possibility of obtaining a Ph.D.; given that he started in college algebra, this felt out of reach. After two years of community college, Aldo was accepted at Eastern Kentucky University and double majored in math and physics. During his time at EKU, Aldo was advised by Dr. Anthony Blose and Dr. Jessica Crist to apply for a Ph.D. program in math or physics and chose the former. At the time, Aldo was working as a line cook, and Dr. Abbey Poffenberger and Dr. Socorro Zaragoza, professors from the Spanish department who help the Latino community in EKU, had reached out to inform him about scholarships that he could apply. With the help of Dr. Lara Vance and other tutors, Aldo obtained a few scholarships to reduce the amount of work while in his bachelor's. In 2018, Aldo attended Ohio University to pursue his master's in math. While there, Aldo taught college algebra and precalculus. In 2020, Aldo was admitted to Michigan State University's Ph.D. program.

At MSU, Aldo was awarded the TA Award for Excellence in Teaching in Spring 2024. He is studying von Neumann algebras under the supervision of Dr. Brent Nelson. Aldo's research is broadly in how von Neumann algebras can be applied to locally compact groups and free probability theory. He has written 3 papers on von Neumann algebras, one of which is published.

Aldo is a graduate teaching assistant at Michigan State University. In the past 4 years, he has taught Calculus 1 and 2, college algebra as a small group and has been the TA for graduate-level analysis. As part of being the analysis TA, Aldo held hour-long sessions discussing how to solve qualifying problems. This was quite difficult since he wanted the students to understand why one certain proof did not work and cement that to them. In the Summer of 2022, Aldo obtained the von Neumann algebra TA position for Groundwork for Operator Algebras Lecture Series (GOALS). GOALS is a 2-week summer school program on operator algebras aimed at the retention of traditionally underrepresented groups and building a strong community of support amongst the participants, contributors, and organizers. To this day, Aldo still interacts with these students and helps them feel included while out at conferences. Given Aldo's background as a Latino first-generation student, he has worked hard to help people feel included in the teaching environment and professional life.

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.