

Latinxs and Hispanics in Mathematical Sciences



Photo courtesy of Sergio Zapata Ceballos

"Hispanic Heritage Month is a time to celebrate the extraordinary contributions of Hispanic mathematicians to our community and profession—and to be re-energized in our efforts to honor their legacy by following in their footsteps."

Dr. Mayecxiliana Cardenas Montoya

Assistant Professor
Allegheny College

Dr. Cárdenas Montoya is a Colombian-Canadian mathematician. She grew up in Manizales, a beautiful mountain city perched in the Colombian Andes and shaped by a century-old coffee-growing tradition. She received her Ph.D. in 2022 from the University of Western Ontario. After spending three years as a Postdoctoral Teaching Fellow at the University of Toronto, she is set to join Allegheny College as an Assistant Professor of Mathematics in the Fall of 2025.

In the math research world, Dr. Cárdenas Montoya uses combinatorial methods to study objects called PI-algebras—associative algebras that satisfy a nontrivial polynomial identity. Her work focuses on identifying criteria that guarantee the existence of such identities. In the classroom, her work is grounded in pedagogies of care and compassion, and she invites students to experience mathematics both as an intrinsically beautiful discipline and as a vehicle for furthering essential 21st-century skills—critical thinking, adaptability, and the confidence to navigate unfamiliar challenges with persistence. She is the proud recipient of the 2024 F. V. Atkinson Teaching Award from the University of Toronto, which recognizes her commitment to excellence in undergraduate mathematics education.

Dr. Cárdenas Montoya believes that as AI and data reshape our modern world, access to advanced mathematical knowledge must not be a privilege, but a right. Alongside her colleagues Niny Arcila Maya and Carlos Ospina, she co-organizes Pares Ordenados, a free online directed reading program aimed at increasing access to advanced mathematical education in Latin America. Through a fifteen-week virtual reading project, Pares Ordenados creates opportunities for students to explore advanced topics in mathematics that might otherwise be inaccessible to them in their regions—but it is more than just academics. At its core, Pares Ordenados is about empowering students to see themselves as part of the global mathematical community and fueling their confidence to pursue ambitious goals. Now in its fourth edition, the program has reached nearly 100 students.

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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