

Latinxs and Hispanics in Mathematical Sciences



Photo courtesy of Rigoberto's wife

Dr. Rigoberto Florez

Professor
The Citadel

Rigo Flórez is a mathematician, professor, and lifelong explorer of patterns. His main research interests are in combinatorics, especially matroids and graph theory. He earned his bachelor's degree in mathematics from Universidad de Antioquia in 1995 and his master's degree from Universidad Nacional de Colombia in 1999. He later completed his Ph.D. at Binghamton University, State University of New York, with a dissertation titled Four Studies in the Geometry of Biased Graphs. He is currently a professor at The Citadel.

"Latino communities enrich and strengthen this country in countless ways, many of which cannot be captured in a short list. Yet our contributions are not always fully recognized. For me, Hispanic Heritage Month is a time to celebrate my Latin American roots and take pride in the richness of our culture, our history, and our shared experiences. It is also a meaningful opportunity to build bridges, share our stories, and honor the ways our community continues to shape the future of the country we call home, the place where we build our lives, dreams, and aspirations."

For Rigo, mathematics is not only about proving theorems. It is also about discovering ideas, asking interesting questions, and sharing the joy of exploration with others. He particularly enjoys working on mathematical projects with undergraduate and graduate students. Together, they develop conjectures, investigate patterns, solve challenging problems, and communicate their discoveries through presentations and publications. Some of his happiest academic moments come from seeing students gain confidence as they realize that they can contribute something new to mathematics.

Rigo has also helped build spaces where mathematicians can meet and exchange ideas. He was a cofounder and longtime leader of the Carolina Math Seminar, a collaborative initiative connecting colleges and universities across South Carolina. Through his outreach work, he seeks to make mathematical research accessible and exciting for students and teachers. He has also supported initiatives that recognize and encourage student research and publication in Colombia.

Rigo Flórez's contributions to the Mathematical Sciences combine research, teaching, and mentoring. His research focuses on combinatorics, particularly matroids and graph theory. He also works on combinatorial geometry, biased graphs, algebraically representable matroids, enumerative combinatorics, and elementary number theory. Rigo enjoys finding connections among these areas and discovering how simple patterns can reveal deeper mathematical structures. His research includes work on matroids, Dyck paths, Fibonacci polynomials, Hosoya-type triangles, projective geometry, and other discrete structures.

Rigo has expanded these opportunities through the Math Research Experience at The Citadel, a free program for high school students and teachers in the Lowcountry, supported by the MAA and the Mary P. Dolciani Halloran Foundation. He has continued this type of mentoring through his Fulbright-supported collaboration with Universidade Federal do ABC in Brazil. His commitment to student research was also strengthened by his participation in several National Science Foundation-supported Research Experiences for Undergraduates.

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.