

Latinxs and Hispanics in Mathematical Sciences



Rosa Orellana

Rosa Orellana received her Ph.D. from UCSD in 1999 under the guidance of Hans Wenzl. After graduation she won a University of California President's Postdoctoral Fellowship at UC San Diego. In 2000, she joined the department of mathematics at Dartmouth College. She is currently Full Professor at Dartmouth where she is lucky enough to teach some of the best students in the country. Rosa has mentored many students on research projects and during the summer of 2013, she led a group of eighteen minority students for MSRI-UP. In 2006, she received the John M. Manley Huntington Memorial Award at Dartmouth for outstanding research, teaching, and mentoring. Rosa is very interested in making students feel welcome, so at Dartmouth she has served as

the advisor for the math club. In addition, Rosa co-funded a chapter of the Association for Women in Mathematics in an effort to increase the number of women taking and majoring in mathematics at Dartmouth. She has also organized Sonia Kovalevsky Math days to encourage middle and high school girls in our community to study mathematics.

Her area of research is algebraic combinatorics. Algebraic combinatorics is an area of mathematics that studies objects that have combinatorial and algebraic properties. An example of such object is the ring of symmetric functions. In algebraic combinatorics, algebraic methods are used to answer combinatorial questions, and conversely, apply combinatorial techniques to problems in algebra. Recently her work has focused on the Kronecker product of two irreducible representations of the symmetric group. Recently, in joint work with Mike Zabrocki, they introduced two new bases for the ring of the symmetric group that they hope will lead to progress on the Kronecker product. Her future plans include continuing to study this product using these bases.

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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