

Latinxs and Hispanics in Mathematical Sciences



Yaiza Canzani

Yaiza Canzani was born in Spain. She grew up in Uruguay, where she obtained her undergraduate degree from Universidad de la República. In 2008 she moved to Montreal (Canada) to pursue her doctoral degree in Mathematics at McGill University. After finishing her Ph.D in 2013, she became a Benjamin Peirce Fellow at Harvard University (USA). She was also a member of the Institute for Advanced Study (USA) and a recipient of a NSERC Postdoctoral Fellowship. Canzani is starting her third year as an Assistant Professor at the University of North Carolina at Chapel Hill (USA). In February 2018 she was named a Sloan Research Fellow.

Canzani's research is dedicated to the understanding of the behavior of Laplace eigenfunctions on Riemannian manifolds. Her goal is to study how the concentration of the eigenfunctions depends on the underlying geometry. She works in high energy regimes, so her main tool is microlocal analysis. Canzani has worked on understanding features of these functions such as the structure of their zero set. This set can be interpreted as the least likely place for quantum particles to be found. By randomizing the eigenfunctions, Canzani has studied the size of their zero set and the diffeomorphism types and nesting configurations of the zero set components. Canzani has also been working on understanding the average oscillatory behavior of the eigenfunctions when they are restricted to a given submanifold. She is currently working on understanding how the dynamics of the geodesic flow impacts the concentration along such submanifold.

"I am honored to participate in this initiative that promotes and celebrates the work of the Latinx community."

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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