



Pacific Institute for the  
Mathematical Sciences

# PIMS Distinguished Speakers Series

## MATILDE LALIN

Associate Professor

Université de Montreal



**BIO:**

Prof. Matilde Lalin is an Argentinian-Canadian mathematician. She did her undergraduate studies in Buenos-Aires, then was a graduate student in Princeton, and subsequently obtained her PhD from the University of Texas at Austin in 2005. She has been a member of several prestigious math research institutes (IAS in Princeton, MSRI in Berkeley, IHES in Paris, Max Planck in Bonn). She was also a PIMS post doc at UBC before becoming an assistant professor at the University of Alberta in 2007. She joined the Université de Montreal in 2010, where she has been an Associate Professor since 2012.

Prof. Lalin's research interest is in number theory, with particular focus on special values of L-functions, Mahler measure and their associated problems. She has published over 30 articles in the past 10 years and given over 120 talks all over the world.

**TITLE:** L-functions and Mahler measure: number theory and beyond

**ABSTRACT:** In this talk we will begin by discussing the main goals of number theory and by explaining why zeta and L functions are important. We will then introduce the Mahler measure, which is a function on the roots of polynomials but can also be extended to multivariable polynomials by doing a complex integral. These two seemingly unrelated topics are surprisingly connected, since the Mahler measure of multivariable polynomials often yields special values of L-functions. We will discuss some aspects of these intriguing relations as well as other unexpected relations arising from Mahler measure.

Friday—March 9, 2018

12:00 to 12:50 pm

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\*\* Donuts & Cookies \*\*