

*Department of Mathematics,
University of California San Diego*

Math 296 - Graduate Student Colloquium

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How groups grow

Abstract:

Given a Cayley graph of a finitely generated group, one can consider its growth function which counts how many elements are there in a ball of radius n on the graph. We will discuss two seminal results in the subject of growth of groups proved in early 1980s: Gromov's polynomial growth theorem and Grigorchuk's construction of groups of intermediate growth. We will illustrate how random walks on the Cayley graphs can help to study growth.

Host: Jon Novak

Wednesday, March 14, 2018

12:00 PM

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