College of Arts and Sciences
Department of Mathematics
University of South Carolina

Math Colloquium

Tropical Geometry of Curves and Their Moduli

Sam Payne, Yale University

Thursday
March 3

4:30-5:30 PM
LeConte 412

Tropical geometry provides an array of combinatorial techniques for studying compactifications and degenerations of fundamental objects in algebraic geometry. The piecewise linear objects appearing in tropical geometry are shadows (or skeletons) of nonarchimedean analytic spaces, in the sense of Berkovich, and often capture exactly the essential information about those spaces that is necessary to resolve questions about classical algebraic varieties. In this colloquium, I will give an overview of tropical geometry as it relates to the study of algebraic curves, moduli spaces of algebraic curves, and refined (or quantum) curve counting.

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