

Geometry, Topology and Dynamics Seminar

Statistical hyperbolicity in Teichmuller space

Spencer Dowdall (Univ. of Illinois Urbana-Champaign)

Abstract: The Teichmuller space of a closed surface exhibits many aspects of negative curvature but fails to be hyperbolic in any global sense. In this talk I will discuss the "statistical hyperbolicity" of Teichmuller space as reflected in the average distances between points in the ball of radius R and also the expected thinness of geodesic triangles. While the competing phenomena of negative and nonnegative curvature both influence these quantities, we will show that negative curvature wins out on average by studying the behavior of generic geodesic rays and establishing a thin triangle result in this setting. This is joint work with Moon Duchin and Howard Masur.

Monday, April 28 at 3:00 PM in SEO 636