

Mathematics Colloquium

Rotation distance, associahedra, and Thompson's groups

Sean Cleary (CUNY)

Abstract

Rotation distance is a metric on the space of rooted binary trees with ordered leaves. There are no known efficient algorithms for calculating rotation distance. Finding rotation distance is equivalent to finding distances in associahedra. Here, I describe some connections with these distances and word metrics in Thompson's groups, and estimate average distances and distributional properties of distances between trees of a fixed size.

Wednesday, 14 September 2016, 4pm Smith Hall 204

Tea and refreshments will be served at 3:45pm.