

1112-05-205 **Megan Owen*** (megan.owen@lehman.cuny.edu). *Polyhedral subdivisions and a partial CLT for tree space.*

The space of metric phylogenetic trees introduced by Billera, Holmes, and Vogtmann (2001) is a polyhedral cone complex. It is also non-positively curved, so there is a unique shortest path (geodesic) between any two trees. I will show how the combinatorics of geodesics with a specified fixed endpoint give rise to a finer polyhedral subdivision, and how this subdivision can be used to prove a partial Central Limit Theorem on the tree space. This talk is a combination of joint work with Ezra Miller and Scott Provan, and Huling Le and Dennis Barden. (Received August 04, 2015)