

1164-05-173

Cvetelina Dimitrova Hill* (cvetelina.hill@gatech.edu), **Sara Lamboglia** and **Faye Pasley Simon**. *Tropical convex hull of polyhedral sets.*

In this talk we will discuss the tropical convex hull of convex sets and polyhedral complexes. We will introduce results on the tropical convex hull of a line segment and a ray, show that for sets in two dimensions tropical convex hull and ordinary convex hull commute, and give a characterization of tropically convex polyhedra. Next, we will use these results to show that the dimension of a tropically convex fan depends only on the coordinates of its rays. We will also give a lower bound on the degree of a fan tropical curve using only tropical techniques. (Received January 18, 2021)