

1096-52-2281 **Ye Luo*** (luoye@math.gatech.edu), 686 Cherry St, School of Math, Georgia Institute of Technology, Atlanta, GA 30332. *Linear systems of tropical curves: a geometric perspective.*

A linear systems of a tropical curve are defined to be a subset of a linear equivalent class of divisors on the tropical curve.

Interestingly there are some unconventional geometric properties of these linear systems. I am going to talk about related geometric notions: tropical convexity, geodesics, dimensions, local fan structures and global cell complex structures. I will also give a definition of a new rank function to the linear systems.

As an application, there is a related talk (presented by Madhusudan Manjunath) in this session on “Smoothing of limit g_d^1 on metrized complexes”. (Received September 17, 2013)