Title: Tropical moments of polarized abelian varieties

Abstract: We introduce the notion of tropical moment of a polarized abelian variety defined over a complete discretely valued field. We discuss in detail the case of Jacobians, where the tropical moment can be computed explicitly and efficiently by electric network analysis on a Berkovich skeleton of the underlying curve (which is a metric graph aka a tropical curve). As an application we present new lower bounds for the modular height of abelian varieties defined over function fields. If time allows we also discuss a number field analogue. Based on joint work with Farbod Shokrieh.