Title:
On the Bogomolov Conjecture over Function Fields

Abstract:
This is joint work with Ziyang Gao. The Bogomolov Conjecture describes the distribution of points of small Néron-Tate height on a subvariety of an abelian variety. If all objects are defined over a number field, the conjecture was proved by Ullmo and Zhang in the late 1990s. It was studied by Cinkir, Faber, Gubler, and Yamaki over function fields, but remains open in its most general form. I will report on progress when the base field is a function field of a curve in characteristic 0. Our main tool is an inequality relating Néron-Tate and Weil heights on a subvariety of a model of the abelian variety.