SPEAKER: Xinyi Yuan (Harvard)

TITLE: $p$-adic Calabi theorem and algebraic dynamical systems

ABSTRACT: The Manin-Mumford conjecture for abelian varieties proved by Raynaud turns out to be wrong for in the dynamical case by a counter-example of Ghioca and Tucker. In this talk, we present another formulation of dynamical Manin-Mumford conjecture. We prove some results necessary in the formulation by the dynamical equidistribution theorem and the $p$-adic Calabi theorem. It is a joint work with Shou-wu Zhang.

RTG title: Introduction to basic height theory

RTG abstract: We talk about the basic properties of Weil height and canonical height for abelian varieties. Then we introduce the Mordell-Weil theorem and the Bogomolov conjecture proved by Ullmo and Zhang.