

Canonical Heights and p-adic Green Functions in Arithmetic Dynamics

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Canonical heights were invented by Neron and Tate as a tool for studying algebraic points on abelian varieties. An analogous construction works more generally on varieties having self-morphisms with eigendivisor classes. In this talk I will discuss work, joint with Shu Kawaguchi, concerning canonical local and global heights associated to morphisms on projective space. In particular, nonarchimedean local heights are closely related to p-adic Green functions, which are useful tools in studying p-adic dynamics.