

A Hirzebruch proportionality theorem in Arakelov geometry

Abstract:

Arakelov geometry combines global analysis and arithmetic geometry. In this talk we describe some applications of a fixed point formula of Lefschetz type. We shall focus on an Arakelov version of the Hirzebruch proportionality principle and a formula for a critical power of \tilde{c}_1 of the Hodge bundle over bases of abelian schemes.