
FÉLIX BARIL BOUDREAU, CICMA & Université du Luxembourg

Abelian varieties with homotheties

Let A be an Abelian variety defined over a number field K . The celebrated Bogomolov–Serre theorem states that, for any prime ℓ , the image of the ℓ -adic representation of the absolute Galois group of K contains all c -th power homotheties, where c is a positive integer. When K is a global function field, Zarhin has shown that the corresponding statement fails in general. In this talk, I will present an analogue to Bogomolov–Serre’s theorem when K is a finitely generated field of positive characteristic. This is part of an ongoing joint work with Sebastian Petersen (University of Kassel).