

On the paramodular conjecture

Ariel Martin Pacetti, Universidad de Buenos Aires

In this talk we will recall the statement of the paramodular conjecture by Brumer and Kramer. We will present a detailed description of the cases where the conjecture is known (for abelian surfaces whose endomorphism ring is not just the rational integers), and we will show how to adapt Falting-Serre's method to GSp_2 to prove new cases of the paramodular conjecture for abelian surfaces whose endomorphism ring is the integers.