

Mordell-Weil ranks in families of elliptic curves parametrized by binary quadratic forms

Bartosz Naskręcki

Adam Mickiewicz University, Poland
nasqret@gmail.com

Session: 3. Arithmetic Geometry

I will discuss certain results about ranks in families of elliptic curves parametrized by binary quadratic forms. I will explain how we can establish sharp bounds for the Mordell-Weil rank of elliptic curves over rational function field and apply those to describe the ranks of the Mordell-Weil group after specialization.