

MORDELL-WEIL RANKS IN FAMILIES OF ELLIPTIC CURVES PARAMETRIZED BY BINARY QUADRATIC FORMS

Bartosz Naskręcki

Adam Mickiewicz University (Poznań, Poland)

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 $K(t)$ and apply those to describe the ranks of the Mordell-Weil group after specialization.