

Department of Mathematics, BGU

AGNT

On Wednesday, November 10, 2021

At 16:00 – 17:15

In -101

ARIYAN JAVANPEYKAR (MEINZ)

will talk about

Rational points on ramified covers of abelian varieties, online lecture

ABSTRACT: Let X be a ramified cover of an abelian variety A over a number field k . According to Lang's conjecture, the k -rational points of X should not be dense. In joint work with Corvaja, Demeio, Lombardo, and Zannier, we prove a slightly weaker statement. Namely, assuming $A(k)$ is dense, we show that the complement of the image of $X(k)$ in $A(k)$ is (still) dense, i.e., there are less points on X than there are on A (or: there are more points on A than on X). In this talk I will explain how our proof relies on interpreting this as a special case of a version of Hilbert's irreducibility theorem for abelian varieties.