Department of Mathematics, BGU

AGNT

On *Wednesday, January ,1 2020*

At *15:00 − 16:15*

In *101-*

Ari Shnidman (HUJI)

will talk about

Monogenic cubic fields and local obstructions

Abstract: A number field is monogenic fi its ring of integers is generated by a single element. It is conjectured that 0% of degree d number fields are monogenic (for any d < .(2 There are local obstructions that force this proportion to be > ,100% but beyond this very little is known. I'll discuss work with Alpoge and Bhargava showing that a positive proportion of cubic fields (d = (3 have no local obstructions and yet are still not monogenic. This uses new results on integral points and ranks of Selmer groups of elliptic curves in twist families.