

Department of Mathematics, BGU

Algebraic Geometry and Number Theory

On Wednesday, January, 10 2018

At 12:10 – 13:30

In TBD

Efrat Bank (University of Michigan)

will talk about

Correlation between primes in short intervals on curves over finite fields

Abstract: In this talk, I present an analogue of the Hardy-Littlewood conjecture on the asymptotic distribution of prime constellations in the setting of short intervals in function fields of smooth projective curves over finite fields. I will discuss the definition of a “short interval” on a curve as an additive translation of the space of global sections of a sufficiently positive divisor E by a suitable rational function f , and show how this definition generalizes the definition of a short interval in the polynomial setting. I will give a sketch of the proof which includes a computation of a certain Galois group, and a counting argument, namely, Chebotarev density type theorem.

This is a joint work with Tyler Foster.

Please Note the Unusual Time and Place!