

Exact Sciences Seminar
Wednesday 02.01.2019 on 16:00-17:00, Ficus 304

Dr. Efrat Bank
Technion

Primes in short intervals on curves over finite fields.

Abstract

We prove an analogue of the Prime Number Theorem for short intervals on a smooth proper curve of arbitrary genus over a finite field. Our main result gives a uniform asymptotic count of those rational functions, inside short intervals defined by a very ample effective divisor E , whose principal divisors are prime away from E .

In this talk, I will discuss the setting and definitions we use in order to make sense of such count, and will give a rough sketch of the proof.

This is a joint work with Tyler Foster.

**Coordinators: Dr. G. Ben-Simon, Prof. I. Goldman, Prof. Y. Stancescu,
Prof. D. Fishelov and Dr. Neta Rabin**