

abstract

COMPUTER SCIENCE/DISCRETE MATH II

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

I will present a recent result of Green and Tao showing the following.

Let $P: F^n \rightarrow F$ be a polynomial in n variables over F of degree at most d . We say that P is "equidistributed" if it takes on each of its $|F|$ values close to equally often.

We say that P has "low rank" if it can be expressed as a bounded combination of polynomials of lower degree, and "high rank" otherwise.

The main result that I'll discuss: Let P be a polynomial of degree less than $|F|$. If P has high rank, then it is equidistributed.