Charles Wolf (Rutgers)

The Polynomial Method and the Finite-Field Kakeya Problem

Abstract for the Combinatorics Seminar 2017 March 21

A finite-field Kakeya set is a subset of $(F_q)^n$ (the n-dimensional vector space over a finite field of order q) which contains a line in each direction. I will first show how to use polynomials to obtain bounds on the size of a Kakeya set in finite vector spaces. Then I will show how to modify this polynomial technique to obtain better bounds on the size of these Kakeya sets. Time permitting, I will discuss bounds on related incidence problems.

From:
https://www2.math.binghamton.edu/ - **Department of Mathematics and Statistics, Binghamton University**

Permanent link:
https://www2.math.binghamton.edu/p/seminars/comb/abstract.201703wol

Last update: **2020/01/29 19:03**