Combinatorics Seminar

Wednesday, March 19th, 2025 4:00-5:00 pm in Hume 331

Ilya Shkredov

Purdue University

Some applications of the higher energy method to distribution irregularities

Abstract

We review recent results obtained by the method of higher sumsets and higher energies. In particular, we discuss two applications: irregularities in the distribution of the difference set and irregularities in the large Fourier coefficients of sets with small sumsets.