

abstract

Computer Science/Discrete Mathematics Seminar II
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

The polynomial Freiman-Ruzsa conjecture is one of the important open problems in additive combinatorics. In computer science, it already has several diverse applications: explicit constructions of two-source extractors; improved bounds for the log rank conjecture in communication complexity; and lower bounds for locally decodable codes based on matching vectors codes. Recently, Tom Sanders proved a quasi-polynomial version of this conjecture. I will describe the polynomial Freiman-Ruzsa conjecture, its applications and the proof of Sanders theorem.