
THE WEIZMANN INSTITUTE OF SCIENCE
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE
Geometric Functional Analysis and Probability Seminar

Room 155 ,Ziskind Building
on Thursday, Dec 19, 2019at 13:30

DOUBLE SEMINAR
Esty Kelman & Asaf Katz.

DOUBLE SEMINAR

Abstract:

Esty Kelman [TAU] Title: Boolean Functions and Their Effective Degree

Abstract: The KKL Theorem (there is always a significantly influential variable) is sometimes tight as in the Tribes functions, but many times is not tight as in the Majority function. We propose a generalized version of KKL, with a new parameter - the effective degree, which replaces the role of the average degree in the KKL statement. This allows us to prove a tight result for many cases shows how large the influence of the most influential variable is. We generalize KKL in another manner finding a significantly influential variable within a subset of variables. This generalization, in turn, implies a generalized version of Friedgut Junta Theorem. If time allows, we will see how easily our Theorem implies the Friedgut Junta Theorem and stronger Junta results.

Asaf Katz [U Chicago] Title: Measure rigidity for Anosov flows via the factorization method

Abstract: We show how the factorization method, pioneered by Eskin and Mirzakhani in their groundbreaking work about measure classification for the moduli space of translation surfaces, can be adapted to smooth ergodic theory. Using this adaption, we show that for a quantitatively non-integrable Anosov flow, every generalized u-Gibbs measure is absolutely continuous with respect to the whole unstable manifold.