

Department of Mathematics, BGU

Combinatorics Seminar

On Tuesday, January, 15 2019

At 14:15 – 15:15

In 101-

Andrey Kupavskii (Oxford)

will talk about

Simple juntas for shifted families

Abstract: We say that a family F of k -element sets is a j -junta if there is a set J of size j such that, for any set, its presence in F depends on its intersection with J only. Approximating arbitrary families by j -juntas with small j is a recent powerful technique in extremal set theory. The weak point of all known approximation by juntas results is that they work in the range $n \gg Ck$, where C is an extremely fast growing function of the input parameters. In this talk, we present a simple and essentially best possible junta approximation result for an important class of families, called shifted. As an application, we present some progress in the question of Aharoni and Howard on families with no cross-matching. Joint work with Peter Frankl.

Please Note the Unusual Time!