Department of Mathematics, BGU

Combinatorics Seminar

On *Tuesday, December ,11 2018*

At *15:45 – 16:45*

In *201*

Yaar Solomon (BGU)

will talk about

Dense forests and low visibility

Abstract: In this talk we will discuss a type of visibility problem (in Euclidean spaces), with an infinite, discrete, set of obstacles. A dense forest refers to a discrete point set Y that satisfies dist(L,Y)=0 for every ray L in R^d, and moreover, the distance between Y and every line segment decays unfiormly, as the length of the segments tend to infinity. The constructions of dense forests that are known today were given using tools from Diophantine approximations (Bishop+Peres), homogeneous dynamics (Solomon-Weiss), Fourier analysis (Adiceam), the Lovász local lemma (Alon), and more tools form number theory and dynamics (Adiceam-Solomon-Weiss). We will discuss some of these constructions of dense forests, as well as the speed of which the visibility decays in them. Some of the results that I will discuss come from a joint work with Faustin Adiceam and with Barak Weiss.

Please Note the Unusual Time and Place!