

Department of Mathematics, BGU

Geometry and Group Theory

On Sunday, January ,8 2017

At 14:30 – 15:30

In 101-

Yaar Solomon (BGU)

will talk about

Dense Forests

Abstract: A discrete set Y in \mathbb{R}^d is called a dense forest if for every positive ϵ , Y is ϵ close to all line segments of length $V(\epsilon)$, for some function $V(\epsilon)$. We will discuss the intuition of this definition and the motivation for having such sets. Then I will present three constructions for dense forests by Bishop-Peres, S.-Weiss, and by Alon, that use basic Diophantine approximations, homogeneous dynamics, and the Lovasz local lemma, respectively. The focus will be on our result (jointly with Barak Weiss) for which I hope to give all the details of the construction. All the definitions and the background will be given in the talk.