Department of Mathematics, BGU

BGU Probability and Ergodic Theory (PET) seminar

On *Thursday, June ,27 2019*

At *14:10 – 15:10*

In *101-*

Itay Londner (University of British Columbia)

will talk about

Optimal arithmetic structure in interpolation sets

Abstract: Given a set S of positive measure on the unit circle, a set of integers K is an interpolation set (IS) for S fi for any data $c(k)$ in $l^2(K)$ there exists a function f in $L^2(S)$ such that its Fourier coefficients satisfy $\hat{f}(k) = c(k)$ for all k in K. In the talk I will discuss the relationship between the concept of IS and the existence arithmetic structure in the set K, I will focus primarily on the case where K contains arbitrarily long arithmetic progressions with specfiied lengths and step sizes. Multidimensional analogue and recent developments on this subject will also be considered. This talk is based in part on joint work with Alexander Olevskii.

Please Note the Unusual Time!