Department of Mathematics, BGU

BGU Probability and Ergodic Theory (PET) seminar

On *Tuesday, June ,12 2018*

At *11:00 – 12:00*

In *201*

Yotam Smilansky

will talk about

Kakutani's splitting procedure for multiscale substitution schemes

Abstract: In ,1975 S. Kakutani introduced a splitting procedure which generates a sequence of partitions of the unit interval ,[0,1] and showed that this sequence is unfiormly distributed in .[0,1] We present generalizations of this procedure in higher dimensions, which correspond to constructions used when defining substitution and multiscale substitution tilings of Euclidean space. We prove unfiorm distribution of these sequences of partitions using new path counting results on graphs and establish Kakutani's result as a special case.