

Department of Mathematics, BGU

Colloquium

On *Tuesday, November ,19 2019*

At *14:30 – 15:30*

In *Math 101-*

Arie Levit (Yale)

will talk about

On Benjamini-Schramm convergence

Abstract: Benjamini-Schramm convergence is a probabilistic notion useful in studying the asymptotic behavior of sequences of metric spaces. The goal of this talk is to discuss this notion and some of its applications from various perspectives, e.g. for groups, graphs, hyperbolic manifolds and locally symmetric spaces, emphasizing the distinction between the hyperbolic rank-one case and the rigid high-rank case. Understanding the “sofic” part of the Benjamini-Schramm space, i.e. all limit points of “finitary” objects, will play an important role. From the group-theoretic perspective, I will talk about sofic groups, i.e. groups which admit a probabilistic finitary approximation, as well as a companion notion of permutation stability. Several results and open problems will be discussed.