

Department of Mathematics, BGU

Colloquium

On Tuesday, January 14 2025

At 14:30 – 15:30

In Math 101-

Yair Glasner (BGU)

will talk about

From lattices to invariant random subgroups and back

Abstract: An IRS on a locally compact group G is defined to be a probability measure on the space of all closed subgroups of G , which is invariant under conjugation. This notion generalizes, at the same time: normal subgroups, subgroups of finite index and lattices in G . More importantly the extra flexibility offered by the probabilistic becomes useful in proving many theorems even in the classical setting. In the past few years, we have been working in the opposite direction: trying to reprove results about IRSs in a more deterministic setting. This approach requires us to consider a much wider class of subgroups that we refer to as boomerang subgroups. I will show how these new methods give rise to a streamlined and more general version of the Nevo-Stuck-Zimmer theorem for certain lattices.

This is a joint work with Waltraud Lederle.