

Department of Mathematics, BGU

BGU Probability and Ergodic Theory (PET) seminar

On Thursday, November 20, 2025

At 11:10 – 12:00

In 101-

Michael Glasner (Weizmann Institute)

will talk about

Character Rigidity and the Stuck-Zimmer Conjecture for Nonuniform Lattices

Abstract: The theory of characters of infinite groups, initiated by Thoma, is a generalization of the representation theory of finite groups. More explicitly, a character of a group is an (extremal) conjugation invariant positive definite function. A group is said to be character rigid if every character of the group is either supported on the center or comes from a finite dimensional representation. Connes conjectured that any irreducible lattice in a higher rank Lie group is character rigid. Surprisingly, this conjecture is a generalization of the celebrated Margulis normal subgroup theorem and of the Stuck-Zimmer conjecture on IRS rigidity. I will discuss a recent joint work with Alon Dogon, Yuval Gorfine, Liam Hanany, and Arie Levit showing that any nonuniform higher rank lattice is character rigid, proving the Stuck-Zimmer conjecture for such lattices.