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 Nonunfiorm 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 said to be character rigid fi every character of the group is either supported on the center or comes from a finite dimensional representation. Connes conjecture 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 nonunfiorm higher rank lattice is character rigid, proving the Stuck-Zimmer conjecture for such lattices.