

Department of Mathematics, BGU

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# BGU Probability and Ergodic Theory (PET) seminar

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*On Thursday, May ,19 2022*

*At 11:10 – 12:00*

*In 101-*

Arie Levit (Tel-Aviv University)

will talk about

## **Characters of groups, stability and sofic dynamical systems**

Abstract: We study the character theory of infinite solvable groups, focusing on the metabelian and polycyclic cases. This theory has applications towards the Hilbert-Schmidt stability of such groups - whether almost-homomorphisms into the unitary groups  $U(n)$  are nearby honest homomorphisms? We explore an interesting link between stability and topological dynamics via a notion of “sofic dynamical systems”. I will introduce all relevant notions.

The talk is based on a joint work with Itamar Vigdorovich.