

Department of Mathematics, BGU

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# BGU Probability and Ergodic Theory (PET) seminar

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*On Thursday, July, 11 2024*

*At 11:10 – 12:00*

*In 101-*

Michael Glasner (Weizmann Institute of Science)

will talk about

## **Boundary representations of locally compact hyperbolic groups**

Abstract: Given a non elementary locally compact hyperbolic group  $G$  equipped with a left invariant metric  $d$  one can define a measure on the Gromov boundary called the Patterson Sullivan measure associated to  $d$ . This measure is non singular with respect to the  $G$  action and contains geometric information on the metric. I will discuss the koopman representations of these actions and sketch a proof of their irreducibility and classification (up to unitary equivalence), generalizing works of Garncarek in the discrete case. I will also describe connections with a recent work of Caprace, Kalantar and Monod on the type I property for hyperbolic groups.