

Department of Mathematics, BGU

AGNT

On Wednesday, November ,12 2025

At 14:10 – 15:10

In 201

Eitan Sayag (BGU (

will talk about

Density of spherical characters

Abstract: Harish Chandra developed representation theory on real and p -adic groups using analytic objects such as matrix coefficients and his distributional characters. He found that density properties of these distributions in the class of all invariant distributions plays an important role in Establishing basic results of Harmonic analysis on the group. Moving to G -Homogeneous spaces, spherical characters are distributions that play an important role in the relative trace formula. These objects were studied extensively in special cases and important results were obtained by Rallis and Rader who formulated natural density problems regarding these distributions. In a joint work with A. Aizenbud (Weizmann) and J. Bernstein (Tel-Aviv), we introduce some algebraic methods based on the concept of Cohen-Macaulay and Bernstein's theory of representations of p -adic groups to tackle some of these density problems in the p -adic case. In my presentation, I will not assume knowledge of Bernstein's theory or knowledge of Harmonic analysis on p -adic groups.