

Department of Mathematics, BGU

AGNT

On Wednesday, November ,26 2025

At 14:10 – 15:10

In 201

Shai Keidar (Regensburg)

will talk about

On the Telescopic Picard Group

Abstract: Chromatic homotopy theory aims to study cohomology theories through a hierarchy of simpler layers, organized by a notion called height. In this talk I will introduce the basic ideas behind this viewpoint and explain two approaches to analyzing these monochromatic layers: the classical $K(n)$ -local category, which is closely related to one-dimensional formal group laws, and the $T(n)$ -local or telescopic category, which is more directly tied to periodic phenomena in the stable homotopy groups of spheres. I will then describe a framework for understanding periodicity inside the chromatic layers, and explain how this allows one to lift Picard elements from the $K(n)$ -local setting to the telescopic setting. Finally, I will present an application to chromatic Galois theory, leading to the construction of a first example of a non-abelian Galois extension in the $T(n)$ -local world.