

Department of Mathematics, BGU

Colloquium

On *Tuesday, December ,30 2025*

At *14:30 – 15:30*

In *Math 101-*

Shira Tanny (Weizmann Institute)

will talk about

Creating periodic points near invariant sets

Abstract: An old question of Poincaré concerns creating periodic points via perturbations of a diffeomorphism. While this question was initially studied in the 60s, various facets of it remain largely open. Recently, several advances were made in the context of Hamiltonian diffeomorphisms, which are diffeomorphisms arising from classical mechanics. I will discuss a variant of this problem in the presence of certain invariant sets, as well as an application to invariant measures. This is based on a joint work with Erman Cineli and Sobhan Seyfardini.