

Department of Mathematics, BGU

AGNT

On Wednesday, January ,8 2025

At 14:10 – 15:10

In 101-

Galyna Dobrovolska (Ariel)

will talk about

**Geometric representation theory, canonical
bases, and explicit character formulas for affine
Lie algebras**

Abstract: I will begin with a tour of classical ideas in geometric representation theory including Kazhdan-Lusztig polynomials and Beilinson-Bernstein localization. Then I will delve into a logical continuation of these ideas in the work of Bezrukavnikov on exotic t -structures. Finally I will explain an application of these ideas to finding explicit character formulas for affine Lie algebras in our joint work with Andrei Ionov and Vasily Krylov.