

THE TRIVIAL NOTIONS SEMINAR

Taeuk Nam

will speak on

Beilinson–Bernstein Localization

ABSTRACT

A common theme in geometric representation theory is to realize some category of representations of some algebraic structure as some category of sheaves that live on some geometric object. This makes the study of the representation category amenable to geometric methods and techniques.

Possibly the most well known and successful example of this theme is Beilinson–Bernstein Localization, which gives an equivalence between $D\text{-mod}(G/B)$, the category of D -modules on the flag variety; and $\mathfrak{g}\text{-mod}_0$, a certain subcategory of the category of Lie algebra representations of the Lie algebra of G .

In this talk, I will give a brief overview on the statement and proof of the Beilinson-Bernstein Localization theorem, and compute a few illuminating examples.

Friday, 9 September, 2022

at 12pm

Science Center, Room 232