Department of MathematicsUniversity of Notre Dame

ALGEBRAIC GEOMETRY AND COMMUTATIVE ALGEBRA SEMINAR

Speaker: Karthik Ganapathy

University of Michigan

Date: Thursday, November 9, 2023

Time: 3:30 PM

Location: 258 Hurley Bldg

Zoom URL: NA



Lecture Title:

GL-equivariant modules over the infinite variable polynomial ring in positive characteristic

Abstract

In the presence of a large group action, even non-noetherian rings sometimes behave like noetherian rings. For example, Cohen proved that every symmetric ideal in the infinite variable polynomial ring is generated by the orbit of finitely many polynomials. In this talk, I will introduce a nice and tractable class of modules over the infinite variable polynomial ring motivated by Cohen's theorem and explain how their structure becomes more complicated in positive characteristic.