

An equivariant analog of the Bass-Quillen conjecture.

Charanya Ravi, University of Oslo

Abstract : The Bass-Quillen conjecture states that every vector bundle over \mathbb{A}_R^n is extended from $\text{Spec}(R)$ for a regular noetherian ring R . Lindel proved that this conjecture has an affirmative solution when R is essentially of finite type over a field. We will discuss an equivariant version of this conjecture for the action of a diagonalizable group scheme. We prove a general result about the triviality of G -equivariant vector bundles over affine G -toric schemes and derive the equivariant analog of the Bass-Quillen conjecture as a corollary. This talk is based on joint work with Amalendu Krishna.

Pre-requisites :
Familiarity with notions in algebra and algebraic geometry.