

Abstract:

Let k be an algebraically closed field of characteristic zero, D be a locally nilpotent derivation on the polynomial algebra $k[X_1, \dots, X_n]$ and A be the kernel of D . In this set up a question of Miyanishi asks whether finitely generated projective modules over A are free. Note that for $n = 3$, by a result of Miyanishi, the kernel A is a polynomial algebra in two variables over k and hence an answer to the question is affirmative.

In my talk I will address this question for $n = 4$.