

On the isotropy of simple polynomial derivations

Let D be a K -derivation of a polynomial ring $R=K[x_1, \dots, x_n]$ over an algebraically closed field K of characteristic 0 , and let $\text{Aut}(D)$ denote the subgroup of K -automorphisms of R that commute with D , that is, the so-called *isotropy* of D . The objective of the talk is to give some results on the following conjecture: If D is simple, then $\text{Aut}(D)$ is a unipotent algebraic group.