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Automorphisms of Chevalley Lie algebras

We start with a commutative ring k (the base), a Chevalley Lie algebra over k , a (commutative unital associative) k -algebra R , and the Lie algebra $g(R)$ obtained from g by base ring extension. The talk will focus on the description of the group of automorphisms of $g(R)$ viewed as a Lie algebra over k (for example if k is the complex numbers and R is Laurent polynomials we are dealing with untwisted affine Kac-Moody Lie algebras).

We will also compare our results and methods (which exploit that conjugacy holds locally for the étale topology of $\text{Spec}(R)$) with what is known in the case of Chevalley groups.