
VINCENT FRANJOU, Université de Nantes

Finite generation of invariants

A classic problem in invariant theory, often referred to as Hilbert's 14th problem, asks, when a group acts on a finitely generated algebra by algebra automorphism, whether the ring of invariants is still finitely generated. I shall discuss joint work with W. van der Kallen treating the problem for a Chevalley group over an arbitrary base. I shall also present progress by A. Touzé, on the corresponding conjecture of van der Kallen for rational cohomology over a field, that uses functor cohomology as an essential tool.