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K-Theory, Quadratic Forms and Number Theory Seminar

Professor Wilberd van der Kallen (Universiteit Utrecht)

will speak on

Cohomological Invariant Theory

Wed 22nd October 2008 at 3:00PM

Location: Mathematical Sciences Seminar Room

The “first fundamental theorem” of invariant theory goes back to the 19th century. Nowadays one says that if a reductive algebraic group acts algebraically on a finitely generated commutative k -algebra, then the ring of invariants $H^0(G, A)$ is also a finitely generated k -algebra. Here k is the ground field. We have conjectured that more generally for any geometrically reductive group scheme G over a field k , the ring of invariants $H^0(G, A)$ is also a finitely generated k -algebra. This conjecture was proved by Antoine Touze, just before his thesis defence. As the proofs are long, we will not have time to discuss them.

This talk is part of the **K-Theory, Quadratic Forms and Number Theory** series. For more, see <https://maths.ucd.ie/seminars>