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Title: Representations of algebraic groups

Abstract : In this talk I'll report on some current work with David Stewart. The main results are a high weight classification of irreducible modules for linear algebraic groups which works over any field, and a result reducing the calculation of the dimension of such modules to the reductive case and the commutative case. Whilst a classification by highest weight might not be so surprising, one feature of interest is that over imperfect fields the commutative case is rather more involved than one might expect. I'll spend most of the talk giving a detailed example of the sort of behaviour one sees before sketching the main steps in the classification.