

Representations of Lie algebras in prime characteristic

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In this series of lectures I shall discuss the representation theory of Lie algebras of reductive algebraic groups over algebraically closed fields of prime characteristic. To each irreducible representation of such a Lie algebra one associates a linear form on the Lie algebra, the p -character of the representation. I shall concentrate on the case where this p -character is nilpotent and look at the connection with the geometry of a corresponding Springer fibre.