

Oberseminar zur Algebra

Lehrstühle A und D für Mathematik

Vortragsankündigung

Zeit und Ort: **Mittwoch, 14. Juli 2010, 10.00 Uhr bis 11.30 Uhr** in SG 12

Vortragender: **Andreas Maurischat**

Titel: **On the inverse problem in iterative differential Galois theory**

Inhalt: Whenever one considers Picard-Vessiot extensions for iterative differential equations in positive characteristic, there occur intermediate iterative differential extensions over which the PV-field is inseparable. In the Galois correspondence, they correspond to nonreduced subgroup schemes of the Galois group scheme. Moreover, the Galois group scheme itself can be nonreduced, and even infinitesimal. In this talk, we are concerned with the question which finite group schemes occur as iterative differential Galois group schemes over a given ID-field. For ID-fields which are PV-extensions of some function field of dimension 1, we give a description of all those finite group schemes.

Wir laden alle Interessierten herzlich zu diesem Vortrag ein.