

Graduiertenkolleg

Experimentelle und konstruktive Algebra



Kolloquiumsvortrag

Dienstag, 22. November 2016, 14:00 Uhr, SeMath

NICLAS KRUFF (LEHRSTUHL A FÜR MATHEMATIK):

An introduction to Poincaré-Dulac normal forms and invariant sets

In the theory of autonomous ordinary differential equations invariant sets play an important role. In particular, we are interested in local analytic invariant sets near stationary points. Invariant sets of a differential equation correspond to invariant ideals of the associated derivation in the power series algebra. In stability theory, invariant sets are used to obtain reduced differential equations. Poincaré-Dulac normal forms are a very useful tool for studying semi-invariants and invariant ideals. We will give an introduction to Poincaré-Dulac normal forms from scratch and we will present two possible approaches to compute normal forms.

Wir laden alle Interessierten herzlich ein.