



Leibniz
Universität
Hannover

Oberseminar

Institut für Differentialgeometrie

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Mishenko-Fomenko subalgebras on regular adjoint orbits

The dual space of each finite-dimensional Lie algebra carries a natural Poisson structure making the space of polynomials defined on the dual into a Poisson algebra. A Mishenko-Fomenko subalgebra (MFS) is a commutative subalgebra obtained from the coadjoint invariants by a shift-of-argument procedure.

In this talk, I will first review some basic features of such MFS's, in particular, I will recall that for semi-simple Lie algebras any MFS is maximally commutative.

In the second part of my talk, I will show that the restriction of any MFS to a regular coadjoint orbit defines an integrable system. This talk is based on a joint project with P. Crooks and M. Röser.

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16:30 - 17:30, b 302

Alle Interessierten sind herzlich eingeladen.