Sondertermin

$\hbar$-BQ

20. 5. 2016 ab ca. 14 Uhr,

KNUT HÜPER

Applying Differential Geometry to Problems in Control, Optimization, Signal Processing, Interpolation and Statistics

Zusammenfassung

It is well known that differential geometry has found its way into physics already for ages. However, it is more recent that concepts from Lie theory or differentiable manifolds are considered useful tools for e.g. improving the efficiency of numerical algorithms or even for the design of new procedures in the above areas of applied mathematics.

CHIARA ESPOSITO

Reduction of pre-Hamiltonian actions

Zusammenfassung

I will present a recent reduction theorem for the tangent bundle of a Poisson manifold endowed with a pre-Hamiltonian action of a Poisson Lie group. In the special case of a Hamiltonian action of a Lie group, we are able to compare our reduction to the classical Marsden-Ratiu reduction.