
BERN-FRIBOURG GRADUATE SEMINAR

a seminar for Master and PhD students

Thursday 1st December, 2022: 17:15 - 18:00

Room 2.52, Perolles 08, Fribourg

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Symplectic Reduction

Abstract

We consider symplectic reduction of a symplectic manifold with a Hamiltonian Lie group G action. For this we make use of the so-called moment map, which is a G -equivariant mapping from the manifold to the dual Lie algebra \mathfrak{g}^* , and on \mathfrak{g}^* we work with coadjoint action. We shall present the reduction with respect to a coadjoint fixpoint $\eta \in \mathfrak{g}^*$. Then we discuss briefly reduction along a coadjoint orbit.