92b:58068 58F05

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A symplectic analogue of the Mostow-Palais theorem.

Symplectic geometry, groupoids, and integrable systems (*Berkeley, CA*, 1989), 173–182, *Math. Sci. Res. Inst. Publ.*, 20, *Springer, New York*, 1991.

The authors prove the following theorem. Suppose given a symplectic action of a compact connected Lie group on a symplectic manifold of finite type which admits a momentum map. Then this data can be obtained as the equivariant reduction of some $\mathbf{R}^{2n}$ with its canonical symplectic structure. Moreover, the action on $\mathbf{R}^{2n}$ can be assumed to be the cotangent lift of an orthogonal action on $\mathbf{R}^n$ of the same group. In addition, it is shown that if a compact Lie group action on a presymplectic manifold admits a momentum map, then it also admits an equivariant momentum map.

{For the entire collection see MR 91m:58004}.

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