Bifurcation of relative equilibria in symmetric Hamiltonian systems at singular momentum values

Antonio Hernandez

IIMAS-UNAM

We will recall the notions of momentum map and reduction of Hamiltonian systems with symmetry, along with known results in bifurcation of relative equilibria at points with non-generic or singular value of the momentum map. We will summarize and illustrate some of our results in bifurcation of relative equilibria in the context of cotangent bundles.