

This lecture is a brief introduction to the minicourse "Integrable and superintegrable systems on moduli spaces of flat connections" by Nicolai Reshetikhin. I will define what is the moment map for a Hamiltonian action of a Lie group G acting on X , explain the construction of symplectic leaves of X/G assuming it is smooth or almost smooth (an orbifold) and focus on the example $X=T^*G$ where G is compact simple.