

The complexity one action is an effective action of a compact torus T^{n-1} on a compact $2n$ -manifold M having isolated fixed points. I will review the known results on the orbit spaces of complexity one actions. The principal examples are the Grassmann manifold $G_{4,2}$, the complete flag manifold F_3 , the 6-sphere, the quaternionic plane HP^2 , the induced action of $(n-1)$ -torus on quasitoric manifolds in general position, hamiltonian torus actions of complexity one in general position. It happens that in all these examples the orbit space is homeomorphic to a sphere. I will briefly explain the proofs.