

## **G.I.T. quotient for the action of finite groups and torus**

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**Abstract:** Geometric invariant theory (or GIT) is a method for constructing quotients by group actions in algebraic geometry, which in many cases appear as moduli spaces parametrizing isomorphism classes of geometric objects such as vector bundles, polarized varieties, etc.. After giving a short introduction to GIT, I will discuss some geometric properties of the quotient for the action of a finite group or a torus.