

Projective Quotient

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Abstract:

Suppose an algebraic group G acts on a variety X . I will discuss how to define the quotient variety $X//G$. When the variety X is projective, the quotient variety $X//G$ is also projective, often called GIT (Geometric invariant theory) quotient. The construction of the quotient involves computing invariant polynomials, which is extremely difficult. I will discuss a criterion which avoids computing invariants.