



On reductive automorphism groups of regular embeddings

[Guido Pezzini](#)

(Submitted on 5 Jun 2012)

Let G be a connected reductive complex algebraic group acting on a smooth complete complex algebraic variety X . We assume that X under the action of G is a regular embedding, a condition satisfied in particular by smooth toric varieties and flag varieties. For any set D of G -stable prime divisors, we study the action on X of the connected automorphism group of X stabilizing D . We determine a Levi subgroup A of this automorphism group, and we compute relevant invariants of X as a spherical A -variety. As a byproduct, we obtain a description of the open A -orbit on X and the inclusion relation between A -orbit closures.

Comments: 39 pages

Subjects: **Algebraic Geometry (math.AG)**

MSC classes: 14M27, 14M17, 14J50

Cite as: [arXiv:1206.0846](#) [math.AG]

(or [arXiv:1206.0846v1](#) [math.AG] for this version)

Submission history

From: Guido Pezzini [[view email](#)]

[v1] Tue, 5 Jun 2012 09:01:34 GMT (35kb)

[Which authors of this paper are endorsers?](#)

Download:

- [PDF](#)
- [PostScript](#)
- [Other formats](#)

Current browse context:

math.AG

[< prev](#) | [next >](#)

[new](#) | [recent](#) | [1206](#)

Change to browse by:

[math](#)

References & Citations

- [NASA ADS](#)

Bookmark([what is this?](#))

