



Math for the people, by the people.

algebraic torus

| | |
|------------------|---------------------|
| Canonical name | AlgebraicTorus |
| Date of creation | 2013-03-22 13:53:27 |
| Last modified on | 2013-03-22 13:53:27 |
| Owner | bwebste (988) |
| Last modified by | bwebste (988) |
| Numerical id | 7 |
| Author | bwebste (988) |
| Entry type | Definition |
| Classification | msc 14L17 |

Let k be a field. Then k^* , the multiplicative group of k is an affine algebraic group over k . An affine algebraic group of the form $(k^*)^n$ is called an *algebraic torus* over k .

The name is to the fact that if $k = \mathbb{C}$, then an algebraic torus is the complexification of the standard torus $(S^1)^n$.