

Abstract

In this paper we treat faithful actions of simple algebraic groups on irreducible modules and on the associated Grassmannian varieties. By explicit calculation, we show that in each case, with essentially one exception, there is a dense open subset any point of which has stabilizer conjugate to a fixed subgroup, called the *generic stabilizer*. We provide tables listing generic stabilizers in the cases where they are non-trivial; in addition we decide whether or not there is a dense orbit, or a regular orbit for the action on the module.