1145-20-93 **John Hutchens*** (hutchensjd@wssu.edu) and **Nathaniel Schwartz**. *Involutions of groups of type* G_2 *over fields.*

We define a generalized symmetric space to be the quotient G/H where G is an algebraic group and H is the fixed point group of an involution of G. Let C be an octonion algebra over a field k, then $\mathrm{Aut}(C)$ is a group of type G_2 over k. We determine the $\mathrm{Aut}(C)$-conjugacy classes of the k-involutions and their respective fixed point groups. It is shown that the classification of conjugacy classes of involutions of $\mathrm{Aut}(C)$ correspond to isomorphism classes of quaternion algebras for almost every field. (Received July 27, 2018)