Nathaniel Schwartz\* (nschwartz2@washcoll.edu) and John Hutchens. On the k-Involutions of  $G_2$  over fields of Characteristic 2. Preliminary report.

Let C be an octonion algebra defined over a field of characteristic 2. In this talk, we discuss a classification of isomorphism classes of automorphisms of order 2 of algebraic groups of the form  $\operatorname{Aut}(C)$ . We do this by describing automorphisms of C fixing a 4-dimensional subalgebra, and then describe those which induce an inner automorphism of order 2. For fields of characteristic not 2, a similar classification has been carried out by Hutchens. (Received September 15, 2016)