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Stacy L. Beun* (s1b96@cabrini.edu), Cabrini College, 610 King of Prussia Rd, Radnor, PA 19087. *Classifying conjugacy classes of maximal (θ, k) -split tori in $SL(n, k)$* . Preliminary report.

Classifying the orbits of a minimal parabolic k -subgroup acting on a symmetric k -variety is essential to the study of symmetric k -varieties and their representations. For general fields, Helminck and Wang gave several general characterizations of these orbits; however, field-specific classifications are still needed for each class of symmetric k -variety. In order to classify these orbits, we need to first classify the H_k -conjugacy classes of maximal (θ, k) -split tori, where θ is the defining involution of the symmetric k -variety and H_k is the fixed point group of θ . In this work, we classify the H_k -conjugacy classes of maximal (θ, k) -split tori for various involutions of $SL(n, k)$ and for a number of bases fields, including finite fields and the p -adic numbers. (Received February 10, 2009)