

1125-20-2819 **Samuel J Ivy*** (samuel.ivy@usma.edu), United States Military Academy, West Point, NY
10996. *Generalizing Parabolic Subsets from Involutorial Automorphisms.*

This exposition focuses on the algebraic and combinatorial structures of symmetric spaces of Lie groups emphasizing the action of involutions on the underline root systems. The characterization of the orbits of parabolic subgroups acting on these symmetric spaces involves the action of both the symmetric space involution on the maximal k -split tori (and their root system) with an opposing involutorial automorphism. This work characterizes the resulting parabolic subsets within the corresponding root system. (Received September 20, 2016)