Meeting: 1003, Atlanta, Georgia, SS 8A, AMS Special Session on Modular Representation Theory of Finite and Algebraic Groups, I

1003-22-31 Alfred G. Noël\* (anoel@math.umb.edu), The University of Massachusetts Boston, 100 Morrissey Blvd, Boston, MA 02125. *Richardson Orbits.* 

Roger W. Richardson proved that any parabolic subgroup of a complex simple adjoint algebraic group admits an open dense orbit in its unipotent part. In the case of complex symmetric spaces we show that there exist some large classes of parabolic subgroups for which the analogous statement which fails in general, is true. Also we extend a theorem of Peter E. Trapa to real reductive exceptional Lie groups. (Received June 21, 2004)