

1086-20-866

Stephen D Smith* (smiths@math.uic.edu), Department of Mathematics (m/c 249), University of Illinois at Chicago, 851 S Morgan, Chicago, IL 60607-7045. *Involutions and the Steinberg module*. Preliminary report.

A result of Geoff Robinson (1988) about all finite groups shows that a mod-2 projective contains a vector fixed by an involution centralizer; and if the module is irreducible, the class of this involution is unique. In the special case of a Lie type group in characteristic 2 and the Steinberg module, a result of Gow (1988) shows this involution is the longest element w_0 of the Weyl group. However, this special case does not seem to have been established independently using the Lie theory. The talk will indicate some preliminary results in that direction. (Received September 14, 2012)