Jessica A. Hamm\* (tuc07283@temple.edu) and Martin Lorenz. Multiplicative Invariants of Root Lattices.

The root systems of Lie theory give rise to some interesting lattices on which the associated Weyl group acts, notably the weight lattice and the root lattice. By a theorem of Bourbaki, the multiplicative invariant algebra of any weight lattice is known: it is a polynomial algebra. Multiplicative invariant algebras of root lattices, however, usually have a more complicated structure. In this talk we will discuss the multiplicative invariant algebras of the so-called classical root lattices under the action of their associated Weyl groups. (Received August 08, 2013)