1078-20-26 Gary M. Seitz* (seitz@uoregon.edu). Unipotent centralizers in algebraic groups.

Let G be a simple algebraic group over an algebraically closed field of arbitrary characteristic and let u be a unipotent element of G. We will discuss the problem of determining whether or not u is contained in the connected component of its centralizer in G? If the characteristic of the underlying field is "good," then this always holds. However, in "bad characteristic" the answer is subtle and quite interesting. (Received October 20, 2011)