1117-20-418 **William D Hardesty*** (hardes1@uga.edu). *On Support Varieties and the Humphreys Conjecture in type A.*

Let G be a reductive algebraic group scheme defined over $\mathbb{F}_p$ and let G_1 denote the Frobenius kernel of G. To each finite-dimensional G module M, one can define the support variety $V_{G_1}(M)$, which can be regarded as a G-stable closed subvariety of the nilpotent cone. A G-module is called a tilting module if it has both good and Weyl filtrations. In 1997, it was conjectured by J.E. Humphreys that when $p \geq h$, the support varieties of the indecomposable tilting modules align with the nilpotent orbits given by the Lusztig bijection. We shall verify this conjecture when $G = SL_n$ and $p > n + 1$. (Received January 18, 2016)