1131-14-40 Erik Insko, Julianna Tymoczko and Alexander Woo* (awoo@uidaho.edu). Another formula for the cohomology and K-theory classes of regular Hessenberg varieties.

We give a formula for polynomial representatives of the Grothendieck ring and cohomology classes of the regular nilpotent Hessenberg varieties (of type A) in the Grothendieck and cohomology rings of the flag variety. Our formulas give these classes as specializations of Grothendieck and Schubert polynomials, but they are different from the earlier formula of Anderson and Tymoczko; indeed they produce different polynomial representatives for the cohomology classes in some examples. Our methods come from commutative algebra and the interpretation of Grothendieck and Schubert polynomials as K-polynomials and multidegrees of matrix Schubert varieties. (Received June 18, 2017)