

1089-14-222

William Graham* (wag@math.uga.edu) and **Victor Kreiman.** *Excited Young diagrams, equivariant K -theory, and Schubert varieties.*

We give combinatorial descriptions of the restrictions to T -fixed points of the classes of structure sheaves of Schubert varieties in the T -equivariant K -theory of Grassmannians and of maximal isotropic Grassmannians of orthogonal and symplectic types. We also give formulas, based on these descriptions, for the Hilbert series and Hilbert polynomials at T -fixed points of the corresponding Schubert varieties. These descriptions and formulas are given in terms of two equivalent combinatorial models: excited Young diagrams and set-valued tableaux. In types A_n and C_n the restriction formulas had been proved earlier by Kreiman by a different method. In type A_n , the formula for the Hilbert series had been proved earlier by Li and Yong. The method of this paper, which relies on a restriction formula of Graham and Willems, is based on the method used by Ikeda and Naruse to obtain the analogous formulas in equivariant cohomology. We also give Hilbert series and Hilbert polynomial formulas which are valid for Schubert varieties in any cominuscule flag variety, in terms of the 0-Hecke algebra. (Received February 15, 2013)