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**Reuven Hodges\*** (hodges.r@husky.neu.edu) and **Venkatramani Lakshmibai**. *Levi subgroup actions on Schubert varieties in the Grassmannian.*

Let  $L$  be a Levi subgroup of the general linear group  $GL_N(\mathbb{C})$  which acts stably by left multiplication on a Schubert variety  $X(w)$  in the Grassmannian. We provide a combinatorial description of the decomposition of the homogeneous coordinate ring of  $X(w)$  (for the Plucker embedding) into irreducible  $L$ -modules for the induced action. This is then used to classify all  $X(w)$  whose homogeneous coordinate rings have a multiplicity free decomposition into irreducible  $L$ -modules in the case where  $L$  is the maximal Levi subgroup which acts on  $X(w)$ . When  $L$  is not maximal we give sufficient conditions for the decomposition to be multiplicity free. (Received February 20, 2018)