1011-14-221 Mohan Kumar Neithalath, A. P. Rao and Ravindra V Girivaru*

(ravindra@math,.wustl.edu), Department of Mathematics, Cupples I, 1, Brookings Drive, Washington University in St. Louis, St. Louis, MO 63130. Generators for vector bundles.

We prove that on a smooth generic hypersurface $X \subset \mathbb{P}^{m+1}$ of degree d and dimension at least 3, a vector bundle with $r \leq m$ generators must be split if m is odd. If m is even, the same is true if $d \geq 3$. This is an extension of a theorem of Faltings for vector bundles on projective space. (Received August 28, 2005)