

1136-13-133

Zachary J. Flores* (floresza@colostate.edu), Colorado State University, Department of Mathematics, 1874 Campus Delivery, Fort Collins, CO 80523-1874, and **Christopher Peterson** and **Gioia Failla**. *Lefschetz Properties for Certain Graded Modules*.

In 2002, it was shown that complete intersections over $k[x, y, z]$ have the Weak Lefschetz Property by utilizing properties of semistable vector bundles on \mathbb{P}^2 . By combining previous techniques with a recent theorem of M. Kunte, we discuss what numerical constraints we must place on a graded module of finite length over $k[x, y, z]$ with $n \times (n + 2)$ relation in order for it to have the Weak Lefschetz Property. (Received January 08, 2018)