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Chris Peterson* (peterston@math.colostate.edu) and **Zach Flores**. *Some aspects of the Weak Lefschetz property*. Preliminary report.

If B is a standard graded Artinian algebra, then B is said to have the Weak Lefschetz Property (WLP) if there exists a linear form, L , such that the multiplication map induced by L from B_i to B_{i+1} has maximal rank for every i . An influential paper by (Harima et al) illustrated how the Grauert-Mulich theorem could be used to help establish WLP in some important special cases. Brenner and Kaid extended these ideas to several further cases. In this talk, the goal is to describe some of these results (including a description of the Grauert-Mulich theorem) and outline how they can be further utilized in a more general setting. This is joint work with Zach Flores. (Received February 05, 2018)