1141-13-262 **Thomas M Ales*** (tales@masonlive.gmu.edu), 210 Marcum Ct, Sterling, VA 20164. *Tight closure invariants in Stanley-Reisner rings.* Preliminary report.

In a ring R of characteristic $p \geq 0$, tight closure I^* of an ideal $I \subset R$, named as such because it is a tighter closure operator than integral closure, is in general difficult to compute. However, a pair of results by Hochster and Huneke make computing the tight closure of ideals in Stanley-Reisner rings relatively simple. If we let $\mathfrak{m}$ be the maximal ideal of a Stanley-Reisner ring generated by the images of the variables of the ring, we will examine all ideals I such that $I^* = \mathfrak{m}$, specifically discussing the minimal number of generators of I, called the $* -$ spread of $\mathfrak{m}$ and the intersection of all such ideals, called the $* -$ core($\mathfrak{m}$). We also make special mention of the similarities between these notions and their integral closure counterparts. (Received July 31, 2018)