

1106-05-2715 **Matthew Moynihan*** (mmoynihan@wooster.edu). *On Permutation Statistics and Algebras*. Preliminary report.

Every permutation statistic describes a set partition of the symmetric group. Turning the blocks of a set partition into formal sums of permutations sometimes produces a basis for an algebra. While many common permutation statistics produce such a result (descent number, descent set, peak set), there are equally common permutation statistics which fail to produce this elegant result (major index, cyclic descent set). In this talk, we explore some of these “successful” permutation statistics and look at their various extensions. (Received September 16, 2014)