

1112-05-303

**Paul Drube\***, 1900 Chapel Drive, Valparaiso, IN 46383. *Combinatorics of Tableau Inversions.*

A tableau inversion is a pair of entries in row-standard tableau  $T$  that lie in the same column of  $T$  yet lack the appropriate relative ordering to make  $T$  column-standard. An  $i$ -inverted Young tableau is a row-standard tableau along with a precisely  $i$  inversion pairs. Tableau inversions were originally introduced by Fresse to calculate the Betti numbers of Springer fibers in Type A; in this talk we approach the topic of tableau inversions from a completely combinatorial perspective. We present formulas enumerating the number of  $i$ -inverted Young tableaux for a variety of tableau shapes, and share the results of a computer program developed to calculate tableau inversions. We close by discussing generalizations of tableau inversions to semistandard tableaux. (Received August 07, 2015)