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)