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Amy Grady and **Svetlana Poznanović*** (spoznan@clemsn.edu). *Mahonian - Stirling pairs of combinatorial statistics for labeled forests.*

Björner and Wachs defined a major index for labeled plane forests and showed that it has the same distribution as the number of inversions. This can be viewed as a generalization of the classical result for permutations. In this talk I will discuss a few other natural statistics on labeled forests. Specifically, I will introduce the notions of bottom-to-top maxima, cyclic bottom-to-top maxima, sorting index, and cycle minima. These statistics are such that the pairs (inv, Bt-max), (sor, Cyc), and (maj, Cbt-max) are equidistributed. Even though our results extend the result of Björner and Wachs and further generalize results for permutations, the picture is not complete and I will discuss some current work on how to improve this. (Received February 04, 2017)