1033-05-252 Alexander Burstein* (aburstein@howard.edu), Department of Mathematics, Howard University, Washington, DC 20059, and Niklas Eriksen (ner@math.chalmers.se), Department of Mathematical Sciences, Chalmers University of Technology and, Göteborg University, SE-412 96 Göteborg, Sweden. Combinatorial properties of permutation tableaux. Preliminary report.

We give another construction of a permutation tableau from its corresponding permutation and construct a permutationpreserving bijection between 1-hinge and 0-hinge tableaux.

The map $irc = i \circ r \circ c$ (inverse of reversal of complement) is known to preserve almost all alignment and crossing statistics on permutation tableaux except for exchanging statistics A_{NE} and A_{EN} . For certain types of permutations, we give a bijection directly on tableaux that corresponds to *irc* on permutations. (Received September 12, 2007)