

1077-05-1300 **Noah Arbesfeld*** (nma@mit.edu). *Partial Permutations Avoiding Pairs of Patterns*.

We continue the study of pattern avoidance in partial permutation initiated in [A. Claesson, V. Jelínek, E. Jelínková, and S. Kitaev. Pattern avoidance in partial permutations. *Electronics Journal of Combinatorics*, 18(1):#P25, 2011]. Namely, we extend previous definitions of shape-Wilf equivalence and \star -Wilf equivalence to sets of patterns, and determine new shape-Wilf equivalences and shape- \star -Wilf equivalences among pairs of patterns of length 3. Using these results, we deduce infinite classes of shape-Wilf equivalent and shape- \star -Wilf equivalent pairs of patterns. We also find all \star -Wilf equivalence classes among pairs of permutations of length at most 4. (Received September 19, 2011)