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Svetlana Poznanovikj* (svetlana@math.gatech.edu). *Cycles and sorting index for permutations and matchings.*

We define cycles and sorting index for matchings in a way that generalizes the cycles and the sorting index for permutations. Using a bijection with weighted Dyck paths we show that this pair of combinatorial statistics has the same distribution as a pair of statistics on matchings defined in terms of nestings. This in turn allows us to refine known results about permutations. (Received February 14, 2012)