

1086-05-905

Samuel Francis Hopkins* (samuelfhopkins@gmail.com) and **Morgan Weiler**
(mocowe@gmail.com). *Pattern avoidance in permutations on posets.*

We extend the concept of pattern avoidance in permutations on a totally ordered set to pattern avoidance in permutations on partially ordered sets. The number of permutations on P that avoid the pattern π is denoted $Av_P(\pi)$. We extend a proof of Simion and Schmidt to show that $Av_P(123) \leq Av_P(132)$ for any poset P , and we exactly classify the posets for which equality holds. (Received September 15, 2012)