

1067-05-220

Lerna Pehlivan* (pehlivan@math.carleton.ca), 1125 Colonel By Drive, Ottawa, Ontario K1S 5B6, Canada. *Top to random shuffles and number of fixed points*. Preliminary report.

Initially we order n cards, 1 at top through n at bottom. We provide the formulas for the expected value and the variance of the number of fixed points of a permutation obtained after a number of *top to random shuffles*. We give two different proofs for each result. We also show that $O(cn)$ top to random shuffles are not enough to achieve convergence to a Poisson(1). (Received August 08, 2010)