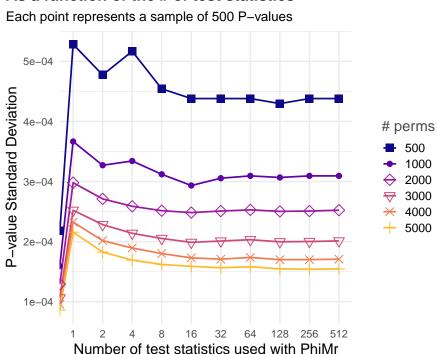
## Standard Deviation of AMKAT P-value on a Fixed Data Set

Simulated SNP set, 28-variable signal set with strongly-correlated components, p = 567, n = 50 Multivariate normal errors with correlated components ( $\pm 0.5$  pairwise)

## As a function of the # of test statistics



(0 corresponds to testing without PhiMr filter)

## As a function of the # of permutation statistics

