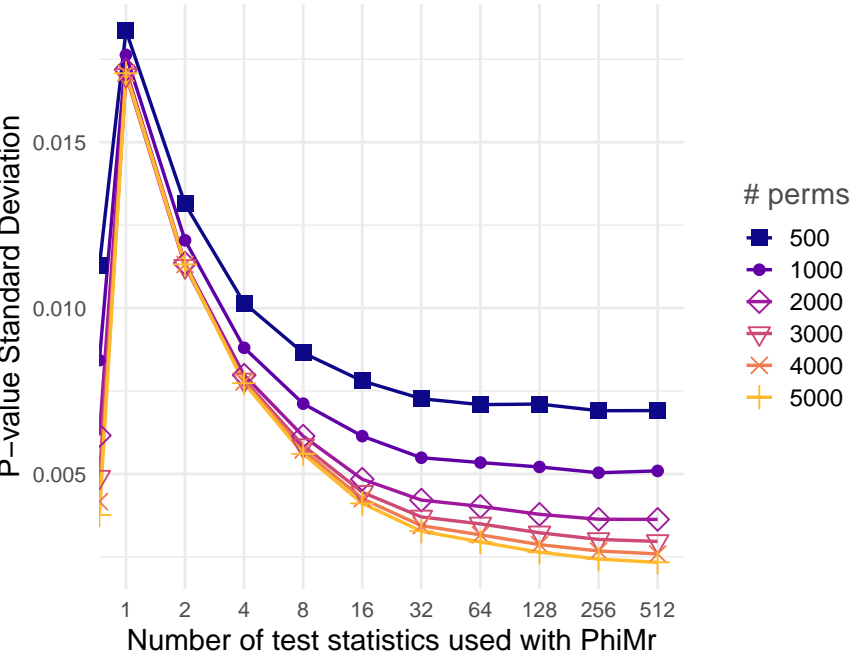


# Standard Deviation of AMKAT P-value on a Fixed Data Set

Discrete (SNP) features, 28-variable signal at 100% strength,  $p = 567$ ,  $n = 50$   
Multivariate normal correlated errors ( $\pm 0.5$  pairwise)

## As a function of the # of test statistics

Each point represents a sample of 500 P-values



(0 corresponds to testing without PhiMr filter)

## As a function of the # of permutation statistics

Each point represents a sample of 500 P-values

