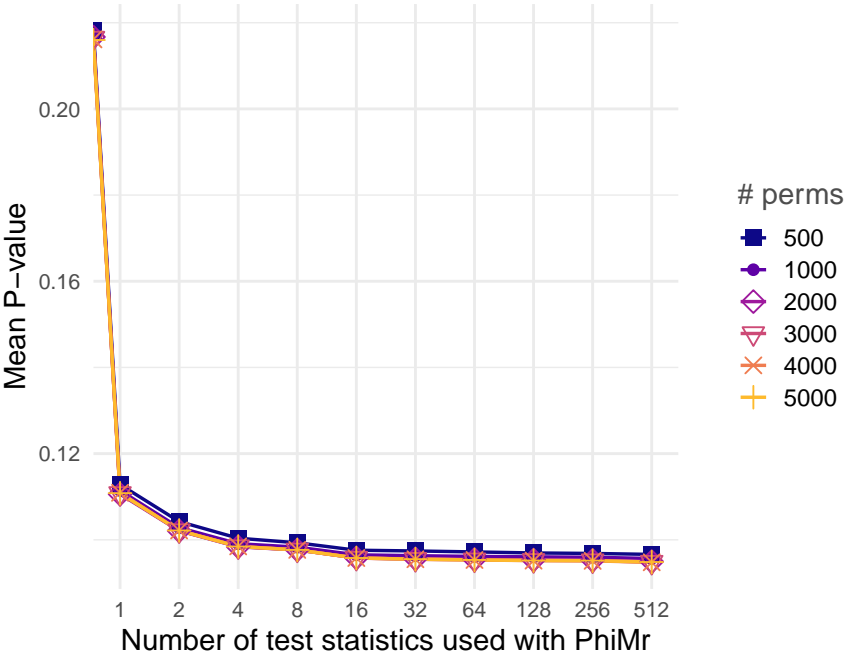# AMKAT Mean P−value on a Fixed Data Set

Continuous features, 7−variable signal set, p = 200, n = 50
Multivariate normal errors with correlated components (±0.5 pairwise)

As a function of the # of test statistics

Each point represents a sample of 500 P−values

As a function of the # of permutation statistics

Each point represents a sample of 500 P−values

Mean P−value (y-axis, left plot)

Number of test statistics used with PhiMr (x-axis, left plot)

(0 corresponds to testing without PhiMr filter)

perms
- 500
- 1000
- 2000
- 3000
- 4000
- 5000

Mean P−value (y-axis, right plot)

Number of permutations (x-axis, right plot)

test stats
- 0 (no filter)
- 1
- 2
- 4
- 8
- 16
- 32
- 64
- 128
- 256
- 512