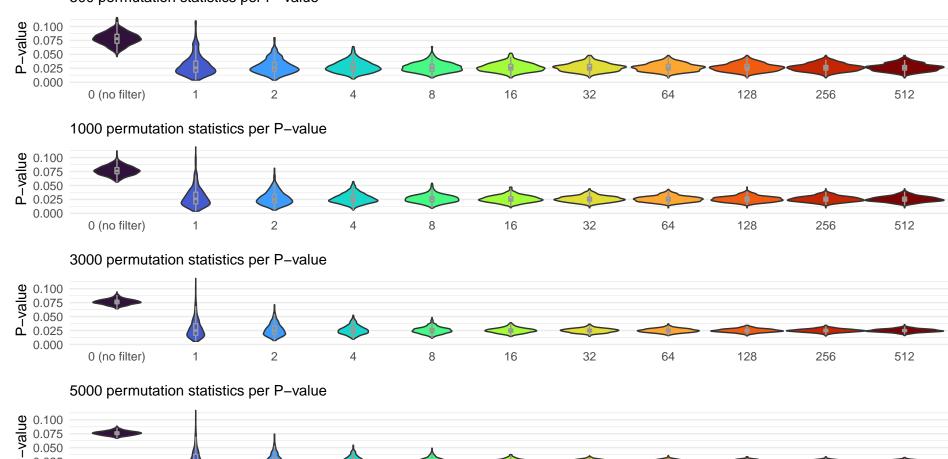# Distribution of AMKAT P−value on a Fixed Data Set

Discrete (SNP) features, 28−variable signal at 100% strength, p = 567, n = 50
Multivariate normal correlated errors (± 0.5 pairwise)
Each sample contains 500 P−values

### 500 permutation statistics per P−value

### 1000 permutation statistics per P−value

### 3000 permutation statistics per P−value

### 5000 permutation statistics per P−value

**Test Statistics Used for P-value Estimate With PhiMr Filter**