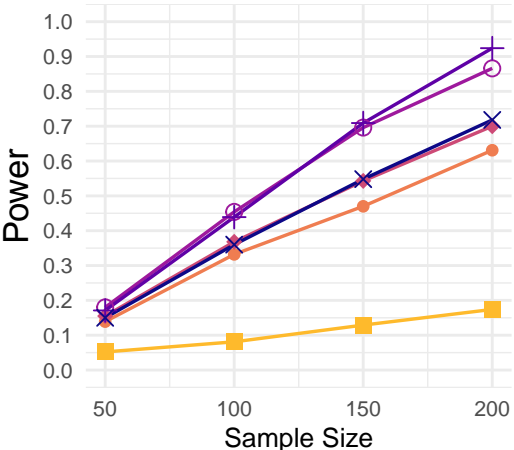


Simulated Power: AMKAT vs. Comparison Methods

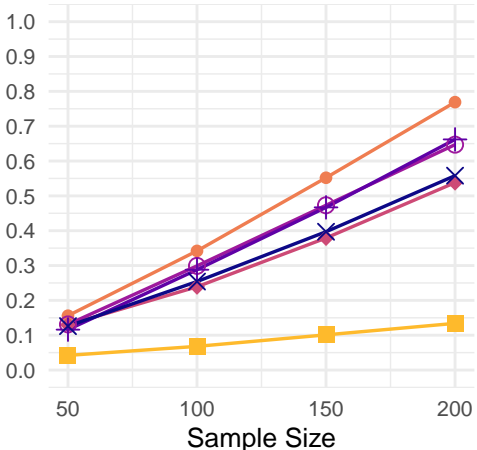
Discrete (SNP) features ($p = 567$), multivariate normal errors, 40% signal strength
Each value based on 1000 simulated data replicates; AMKAT P-values estimated using 1000 permutations

28-variable signal

Independent errors

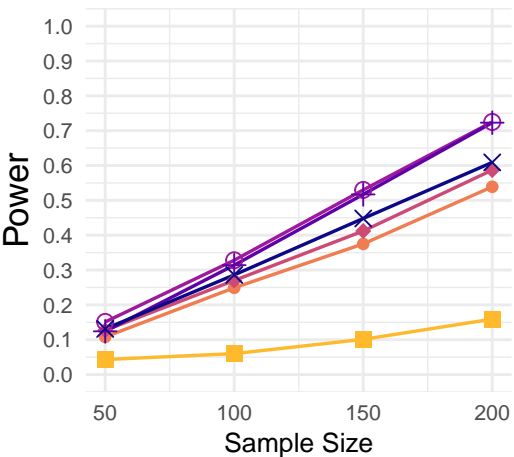


Correlated errors (± 0.5 pairwise)

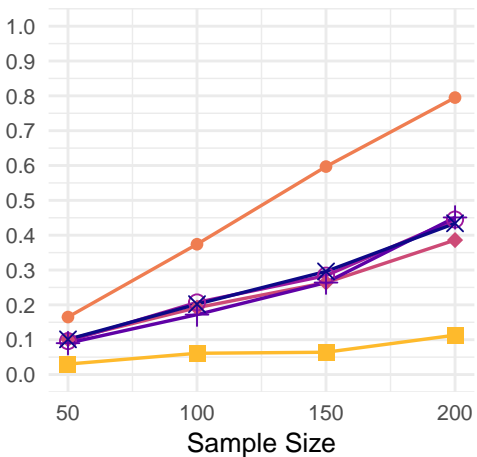


123-variable signal

Independent errors



Correlated errors (± 0.5 pairwise)



- OMGA
- DKAT
- DKAT with Linear Phenotype Kernel
- AMKAT (no filter)
- AMKAT (PhiMr filter) with 64 test stats
- AMKAT (PhiMr filter) with 128 test stats