

Computation Environment Setup

- Serial
- Single node with multiple cores
- Multiple nodes with multiple scores

Data Integration

- Genotype
- Genotype annotation
- Longitudinal trait
- Covariate

Ad-Hoc QC for genotype data

- Missing rate
- Monomorphic site
- Set with not enough SNPs

GEE Fitting longitudinal data
under H_0 to
derive score vector and
variance-covariance matrix

(optional) Permutation
Procedure to obtain null
distribution of score vector for
LaSPU

Execute Five Tests (default):

- Sum Test
- SSU(w) Tests
- UminP Test
- Score Test
- LaSPU