Code Summary Map

Green = Necessary for generation and analysis of microstructure simulation

Slurm Scripts tests/

- run parametric tests.sl
 - Run tests with parametric params
- run generate vtk.sl
 - Generate vtk for a set of runs in python
- run_analyze_phase.sl
 - Generate boundary vtk files for a run
- run_strong_tests.sl
 - · Run strong configs
- run_weak_tests.sl
 - Run weak configs
- paraview.sl
 - Manually convert a single directory to vtk
- run_config.sl
 - Manually run a single configuration

Python Scripts tests/

- scaling tests.py
 - Organize running of `var_diff.f` tests with parameter configs
 - plot_display.py
 - Plotting functions
 - run_phase_sim.py
 - Running and analysis functions

Fortran Scripts src/

- analyze_phase.f
 - Calculate boundaries of simulation output
- paraview.f
 - Generate vtk files for simulation output
- var diff.f
 - Run simulation
 - f_trans.f
 - Fourier transform
 - inv trans.f
 - Invers Fourier
 - · k space.f
 - Generate k vector
 - ran_2.f
 - Random numbers

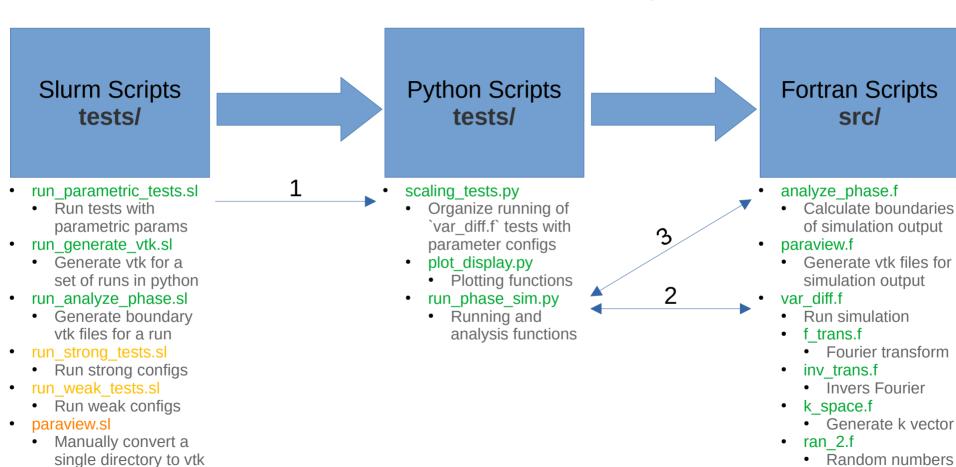
Simulation Running Pipeline

run config.sl

Manually run a single

configuration

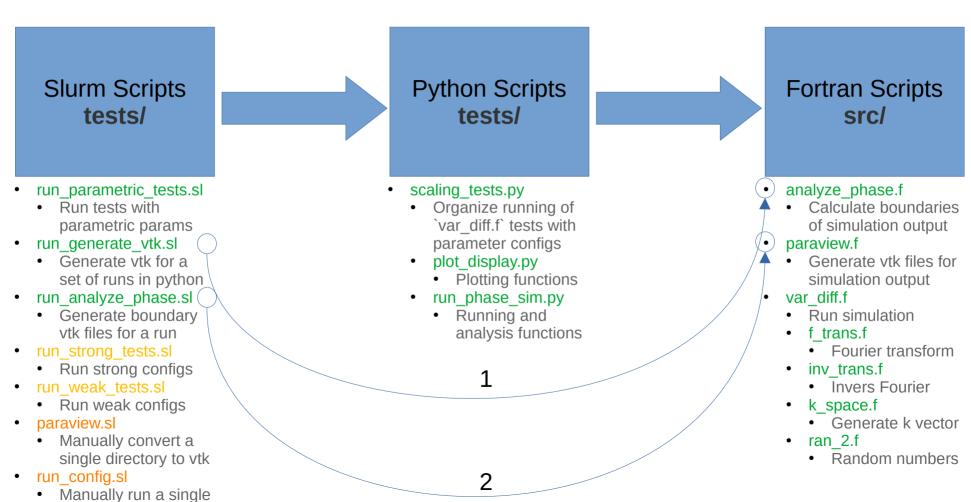
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Analysis Pipeline

configuration

Green = Necessary for generation and analysis of microstructure simulation



View phi_3, con, and boundary .vtk files with paraview client