Code Summary Map

Green = Necessary for generation and analysis of microstructure simulation

- 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

- 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

- 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

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- analyze_phase.f
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Analysis Pipeline

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