Observations

* Wang-Landau is very faster than Ising for smaller lattices (L = 16)
* The simple Wang-Landau implementation can't easily be applies with L >32 because the random walk in state space doesn't finish in a reasonable time
  + More advanced Wang-Landau implementation does parallel walks over different ranges of state space
  + If using simple algorithms only, Ising is the choice for larger lattices
* Both algorithms provide the profile of energy, magnetization and heat capacity with thermodynamic beta, but each has different "by products"
  + Ising provides an animated visualization of fluctuations in the lattice
  + Wang Landau provides the density of states
* Hot start vs. cold start does not seem to make any difference to the random walk in Wang Landau
* Calculated heat capacity scales differently between the two algorithms, although the profile and maxima are in the same place
* Magnetization is harder to deal with in Wang-Landu because a micro-canonical average of magnetization has to be calculated for each energy level. This method seems to overestimate the magnetization at high temperatures since <magnetization> is never quite zero, whereas Ising delivers <magnetization> directly and is closer to expected 0 at high temperature
* Wang Landau permits more post-analysis. Once the DOS has been determined then different numerical integrations can be run for different temperate ranges and steps, whereas Ising requires that any temperature point be simulated directly

Next step ideas