

Brendan Philbin

Several Seeds Analysis

Import Relevant Files

```
In[ ]:= Clear["Global`*"];
SetDirectory[NotebookDirectory[]];
numSweeps = Range[0, 100];
colors = {Darker[Red], Blue, Darker[Green], Black, Orange};

For[t = 1, t ≤ 3, t++,
  For[r = 0, r ≤ 4, r++,
    Evaluate[Symbol["rawTrial" <> ToString[t] <> "r" <> ToString[r]]] = Flatten[
      Import["several_seeds_output" <> ToString[t] <> "_r" <> ToString[r] <> ".csv"]];
    Evaluate[Symbol["trial" <> ToString[t] <> "r" <> ToString[r]]] = Transpose[
      {numSweeps, Evaluate[Symbol["rawTrial" <> ToString[t] <> "r" <> ToString[r]]]}];
    Evaluate[Symbol["plot" <> ToString[t] <> "r" <> ToString[r]]] = ListLinePlot[Evaluate[
      Symbol["trial" <> ToString[t] <> "r" <> ToString[r]], PlotStyle → colors[[r]]];
  ]
];

In[ ]:= Show[plot1r0, plot1r1, plot1r2, plot1r3, plot1r4, Frame → True,
  FrameLabel → {"# of Sweeps", "Dimensionless Energy"}, PlotRange → All,
  PlotLabel → "Trial 1: N = 64, M = 100, J_SEED = 10,  $\beta$  = 5", LabelStyle → Black]
Show[plot2r0, plot2r1, plot2r2, plot2r3, plot2r4, Frame → True,
  FrameLabel → {"# of Sweeps", "Dimensionless Energy"}, PlotRange → All,
  PlotLabel → "Trial 2: N = 64, M = 100, J_SEED = 10,  $\beta$  = 5", LabelStyle → Black]
Show[plot3r0, plot3r1, plot3r2, plot3r3, plot3r4, Frame → True,
  FrameLabel → {"# of Sweeps", "Dimensionless Energy"}, PlotRange → All,
  PlotLabel → "Trial 3: N = 64, M = 100, J_SEED = 10,  $\beta$  = 5", LabelStyle → Black]
```



