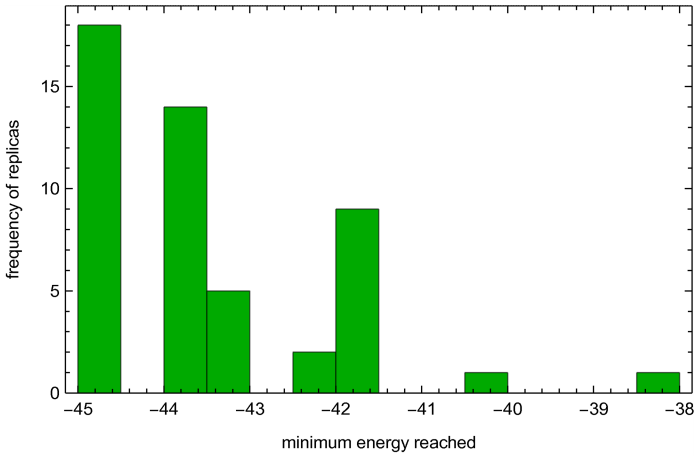
Brendan Philbin
Thermal Annealing Analysis

Trial 1 (no annealing): N=32, M=1000, R=50, J=2, S=3, C=4, β=5

In[73]:=
```
SetDirectory[NotebookDirectory[]];
trial1 = Flatten[Import["histogram1.csv", "CSV"]];
Histogram[trial1, 100, ChartStyle → Darker[Green], Frame → True,
 FrameLabel → {"minimum energy reached", "frequency of replicas"}]
```

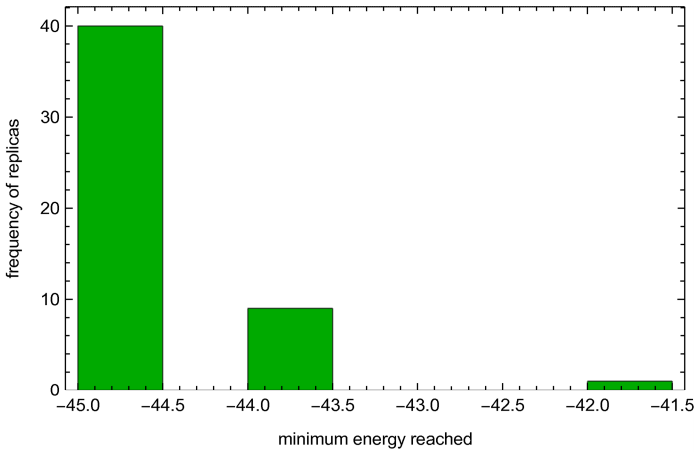
Out[75]=



Trial 2 (no annealing): N=32, M=2000, R=50, J=2, S=4, C=5, β=5

In[76]:=
```
trial2 = Flatten[Import["histogram2.csv", "CSV"]];
Histogram[trial2, 100, ChartStyle → Darker[Green], Frame → True,
 FrameLabel → {"minimum energy reached", "frequency of replicas"}]
```

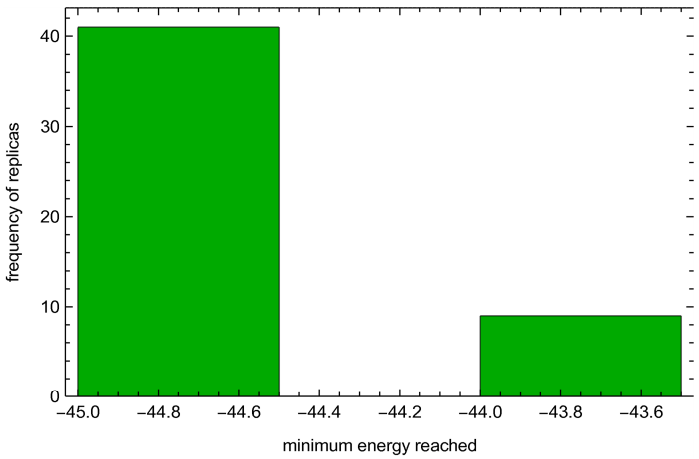
Out[77]=



Trial 3 (no annealing): N=32, M=4000, R=50, J=2, S=5, C=6, β=5

In[78]:=
```
trial3 = Flatten[Import["histogram3.csv", "CSV"]];
Histogram[trial3, 100, ChartStyle → Darker[Green], Frame → True,
 FrameLabel → {"minimum energy reached", "frequency of replicas"}]
```

Out[79]=

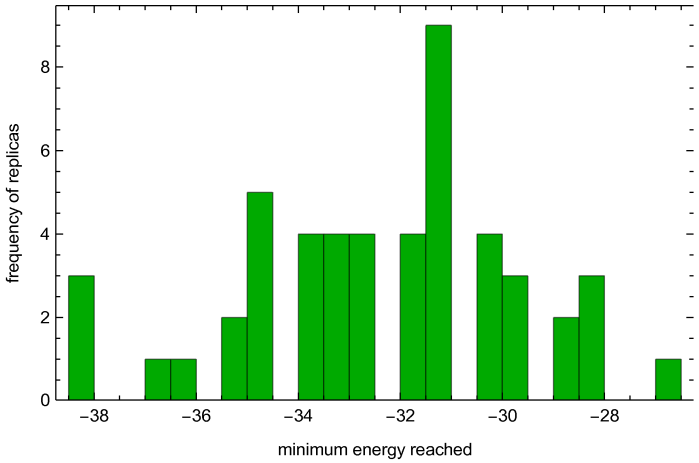


Trial 4 (w/ annealing): N=32, M=1000, R=50, J=2, S=3, C=4,

β=5

In[80]:=
```
trial4 = Flatten[Import["histogram4.csv", "CSV"]];
Histogram[trial4, 100, ChartStyle → Darker[Green], Frame → True,
 FrameLabel → {"minimum energy reached", "frequency of replicas"}]
```

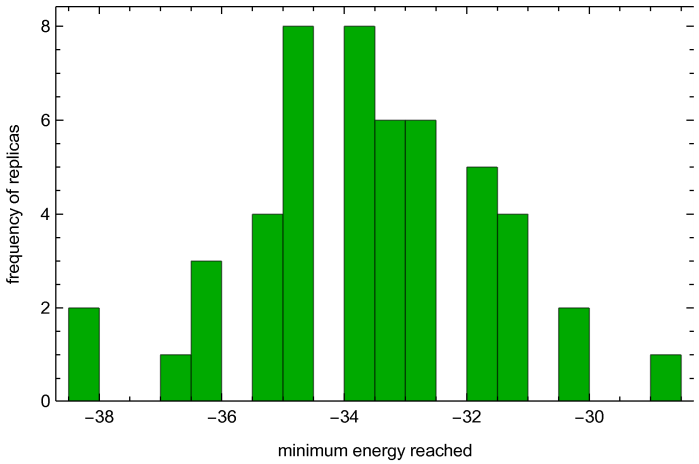
Out[81]=



Trial 5 (w/ annealing): N=32, M=2000, R=50, J=2, S=4, C=5, β=5

In[82]:=
```
trial5 = Flatten[Import["histogram5.csv", "CSV"]];
Histogram[trial5, 100, ChartStyle → Darker[Green], Frame → True,
 FrameLabel → {"minimum energy reached", "frequency of replicas"}]
```

Out[83]=



Trial 6 (w/ annealing): N=32, M=4000, R=50, J=2, S=5, C=6, β=5

In[84]:=
```
trial6 = Flatten[Import["histogram6.csv", "CSV"]];
Histogram[trial6, 100, ChartStyle → Darker[Green], Frame → True,
 FrameLabel → {"minimum energy reached", "frequency of replicas"}]
```

Out[85]=