Physics (6)562: Statistical Mechanics  
Spring 2014, James P. Sethna  
Homework 12, due Wednesday April 30

Remember to turn in your peer reviews  
today (Wed 23) or Friday April 25

Reading  
Entropy, Order Parameters, and Complexity: Chapter 12

Exercises  
We’ll choose in lecture between these options:

Do one of two:
12.2 Scaling and corrections to scaling  
12.3 Scaling and coarsening

Do one of two:
12.4 Bifurcation theory  
12.6 The onset of lasing

Do one of two:
12.7 Renormalization-group trajectories  
12.8 Superconductivity and the renormalization group (more advanced)

Do one of two:  
12.10 The renormalization group and the central limit theorem (short)  
12.11 The renormalization group and the central limit theorem (long)