5 Quantum Statistical Mechanics & Computation

All exercises are found in *Entropy, Order Parameters, & Complexity*, which is online at https://sethna.lassp.cornell.edu/StatMech.

7.9. Bosons are gregarious: superfluids and lasers
7.12. Semiconductors
7.27. Heisenberg entanglement (optional challenging problem, extra credit!)
8.1. The Ising model (short)
8.2. Ising fluctuations and susceptibilities
8.6. Metropolis (short)
8.7. Implementing Ising
8.19. 2D Ising cluster expansion