PY 542: Non-Equilibrium Statistical Physics Problem Set 9, Fall 2011

Reading: This week we continue with the dynamics of the Ising-Glauber model. I'll then turn to the voter model, and finally to spin-exchange dynamics. Please read, in order, sections 8.5 & 8.6, then 8.1, and finally 8.7 of the text.

Problems: Due Monday, November 14 by 5:00pm.

- 1. Text 8.4.
- 2. Text 8.5.
- 3. Text 8.10.
- 4. Text 8.17. The second sentence of this problem is unclearly worded. Here is a better wording: "Consider the region [1, L]. Suppose that the spin at x points down, while all remaining spins in [1, L] point up."