Zewail City of Science and Technology

PEU Program, Fall 2018-19

PEU 450: Computational Physics

Homework 11

Due date: Thursday, Dec 19



- 1. Using the given program for Monte Carlo:
 - (a) (10 points) Reproduce Fig. 8.9 as close as you can.
 - (b) (10 points) Reproduce Fig. 8.10.
 - (c) (10 points) Reproduce Figs. 8.11 and 12 for the first-order phase transition. Here you have to modify the flipping energy to include the effects of the magnetic field.
 - (d) (5 points) Reproduce Fig. 8.14.
 - (e) (5 points) Reproduce Fig. 8.15.
 - (f) (10 points) Reproduce Fig. 8.16.