

Übungen zu
Computational Nanoscience

– Blatt 11 –

Prof. Dr. Alexander Lichtenstein
zum 29.06.2016

Die Übung findet um 14:15 Uhr im PHYSnet-Pool 3 statt!

Aufgabe 1) Ising model

Use the program "Ising" to simulate a two-dimensional ferromagnetic system. What happens for different temperatures and external fields? Plot the magnetization M as a function of the external field H .

Aufgabe 2) Antiferromagnetic system

Use the program "Neel" to simulate an antiferromagnetic system. How must the exchange parameter J in the Ising model be modified? Which phenomena can be observed that do not occur in the ferromagnetic case?