

Using *StatMech* to Calculate Macrostate Multiplicities Spring 2005

Introduction

The following exercise uses Moore's *StatMech* program to calculate macrostate multiplicities

Experiment

1. Starting the program

Open the T:\phys151 directory. *StatMech* is located within; double-click it to start. Since the program is available on the campus network, you can play around with the values using any campus computer, or copy it to your personal computer (a Macintosh version is also located on the T: drive. Both versions can be downloaded from [Moore's website](#)).

2. Exercises

Read the description of the program and its operation in section T4.6 (p. 68). Do the following exercises:

- T4X.6
- T4S.6
- T4S.7
- T5S.3

You may work alone, or in groups of *no more than two*. For each problem, print a single copy of the graph (*not the data – it will print too many pages!*) for the group; each person should write up their own answers.