# Exercise 5

#### Molecular Statistic, Week 5

#### 2014

# 1 Introduction

Writing simulations is one thing, but sometimes it is also necessary to data-mine, manipulate and visualize data. Python is great for this, and so the goals of this exercise is:

- 1. Use Python to load/read data
- 2. Use numpy to manipulate data
- 3. Use matplotlib/pylab to illustrate
- 4. Save Numpy data

# 2 Exercises

Which will be done with small individual exercises.

### 2.1 Dissociation energy of a water dimer

- 1. Convert the distance from A.U. to Ågnstroem.
- 2. Convert the energy to kJoule/mol. Plot the result
- 3. Convert the energy to kcal/mol. Plot the result.