## **Homework Fits**

I have done all three parts of the exercise, using the provided data.

Note, the output from all parts are largely combined into one, part A was getting and plotting the coefficients, part B was getting the errorbars and part C was plotting the errorbars are done together, the function I made gets both the coeficients and the errors.

I did talk to other people about this exercise, and I got the same coefficients and errors as them, so I am very confident this is working right.

NOTE my matrix display functions print ROUNDS to the third digit. (As far as I know, the function ROUNDS to the NEAREST)

NOTE matrix.cs is MY OWN implementation of a matrix class

My pseudoinverse function is in matrix.cs, my fit function is in fit.cs. I just thought it made sense to put it there.

## PART A and B

Output: the text file outA\_And\_B.txt, parameters and halflife, with and without error bars. The image PartA.png with the errors on the points

## PART C

Output: The image partC.png has the upper and lower bounds, as you asked for.