Project for Judy Xu -- Robert Main & Ue-Li

1. Read and identify giant pulses in the data of the Crab pulsar, taken by the Effelsberg telescope, using the baseband reading package: https://github.com/mhvk/baseband

2. Coherently de-disperse a giant pulse. Plot the dynamic spectrum of the dispersed pulse, the de-dispersed pulse, and determine the S/N of the pulse summed over all frequencies.

3. Compare the frequency spectrum of at least two giant pulses and calculate a measure of the correlation between them. Time permitting, compute the correlation coefficient of all pulse pairs as a function of time separation between them (this is a larger scale goal, and realistically will take a couple of weeks).