Home Assignment 3

1. Using data provided in the file `http://th-www.if.uj.edu.pl/zfs/gora/timeseries18/data03.txt`, find the order of an appropriate AR(p) model and fit its parameters.

2. Using your favourite FFT package, calculate the power spectrum (the periodogram) of the time series from the above data file. Calculate the power spectrum of the fitted process. Plot both on a log-log scale. (Note: As a consequence of different normalizations used, the power spectra may need to be rescaled in order to match.)

3. Compare your results to what you would get using

   (a) first 128

   (b) first 256

   datapoints only.

Have fun!
PFG