

EP 4130/PH 6130 Assignment 7

Deadline **8 March 2020** before **20:00 hrs**

Please show the source code.

1. arXiv:1710.06068. Problem 2 (see Page 10) (30 points)
2. Download the SDSS quasar dataset from http://astrostatistics.psu.edu/datasets/SDSS_quasar.dat. Plot the KDE estimate of the quasar redshift distribution (the column with the title z) using a Gaussian and also an exponential kernel (with bandwidth=0.2) from -0.5 to 5.5. (30 points)
(Hint: Look at the KDE help page in scikit-learn or use the corresponding functions in astroML module by looking at source code of astroML figures 6.3 and 6.4)