

EP 4130/PH 6130 Assignment 8

Deadline **4 April 2023** before **23:59 hrs**

Please show the source code.

1. Calculate the angular two-point correlation function of galaxies (including errors obtained by 10 bootstrap resamples) using subset of data from the Blanco Cosmology Survey with r -band magnitude between 17 and 20, and using 16 logarithmic-spaced angular bins from $1/60^\circ$ to 1° . Use a linear scale for Y-axis. Galaxies in Blanco Cosmology Survey have `spread_model` > 0.002 . This data can be downloaded from http://www.iith.ac.in/~shantanud/BCS05hr_reduced.txt (30 points)
(Hint : Look at the astroML source code for Figure 6.17)