

Astronomy 312 - Fragile

Project 3 (assigned 3/15/16; due 4/12/16)

1. Using the Sloan Digital Sky Survey QSO catalog

https://www.sdss3.org/dr9/algorithms/qso_catalog.php

create a plot of the number of QSOs as a function of redshift. You will need to bin the redshift data; try bin widths of $\Delta z = 0.5$. First plot the data without correcting for the expansion of the universe by simply plotting the number of QSOs per redshift bin.

2. Now, create a second plot correcting for the expansion of the universe by dividing the number of QSOs in each bin by a factor of $(1 + z)^3$.
3. Is there any evidence for evolution in the number density of QSOs in your data?