

PHY 475

Literature Review 2

(Due in D2L Dropbox by 5 PM, Thursday, 5/31)

Write a (minimum) **5-page review paper** with the following title:

Two Observational Probes of Dark Energy, The State of the Art

Instructions:

- **Pick any two** of the following methods:
 - Type Ia Supernovae
 - Baryon Acoustic Oscillations
 - Weak Lensing
 - Clusters of Galaxies
- **Search the literature** to find information on the method you picked. The literature search part of this is going to be very easy, because there is a recent review article by Weinberg et al. (2012), which is posted on the same page where you got this file. *Please do not print out this paper – it has 275 pages in it! You'll be looking at less than 5% of the entire paper.* They give a summary of the work on each of the methods listed above, and you should be able to get most of your material from their review, but do follow some of the links to look at the papers directly. Mention (only) the papers you looked at in a bibliography.
- For each of the two methods you picked, you should include:
 - How is this method used to determine the cosmic acceleration by the dark energy?
 - What is the current state of the art for this method?
 - What are the prospects for future work?

*The (minimum) 5-page paper should be double-spaced, with 1-inch margins on all sides, with 12 pt Times New Roman font, or equivalent. **Do not include** the bibliography in your page count.*

This assignment is due in the D2L Dropbox by 5 PM on Thursday (5/31). Late assignments will not be accepted under any circumstances. Emailed papers will not be accepted, they must be submitted to the D2L Dropbox.