Announcements

- **No more homework problems!** The problem set that you turn in today (Problem Set #5), is the final one of the semester.

- **Final Exam next Thursday.** The final examination will be given on Thursday, May 10, from 1:00 PM → 3:00 PM, in Rm. PA 216 (normal lecture room). It will be similar in format to the midterm exam, consisting of multiple choice, short answer, and essay sections. Since the first midterm covered the “galaxies” portion of this course, the final exam will be heavily weighted towards the “cosmology” half of the class, although some questions will be drawn from the earlier material (i.e., it is a comprehensive final). Additional details about the exam will be given in the final class on Tuesday, May 8.

- **Final project oral presentations next Friday.** The oral presentation session of the final project will be held during a special meeting next Friday, May 11, from 2 – 4:30 PM in Rm. PA 216 (normal lecture room). The order of the final presentations will be included in a handout given out this Thursday. *(If you are unable to attend the session next Friday, you must let me know by this Thursday; you will be permitted to give your final presentation during the last class meeting next Tuesday.)*

- **Due date for final (written) project extended.** In response to student concerns, I have decided to extend the deadline for the written component of the final project. While I encourage you to turn the written report in at the oral session on Friday, May 11, I will accept it up until **4:30 PM on Thursday, May 17.** (Note that I will be out of town from Tuesday, May 15 through Thursday, May 17; if you will be turning in your report during that time, just place it in my mailbox in the astronomy office.)

- **Course grades.** As set forth in the course syllabus, this class is graded according to a quantitative grading scale. You can figure out exactly what your course grade is at the present time, or will be (given predicted outcomes on the final project/final examination), by looking at pages 5 and 6 of the syllabus handout.

Reading Guide

1. **Text – Chapter 16 (lightly): The Early Universe.**

   We only covered the basics from this chapter during our last week of class, and you are therefore only responsible for the material explicitly presented in class. However, the presentation did loosely follow the text, and I therefore think that it would be helpful to at least skim over this interesting material; you may find that reading it helps fill in gaps in understanding left over from the lectures. In particular, you may want to focus your reading on the following particular subsections, which were covered in somewhat more detail than the others:

   - Section 16.1: *Unification and Spontaneous Symmetry Breaking; Problems with the Standard Theory of the Big Bang; Inflation; The False Vacuum; The CMB and the Decoupling of Matter and Radiation.*
   - Section 16.2: *Acoustic Oscillations and Damping; Cosmic Harmonics and Acoustic Oscillations; Fine-Tuning Our Understanding of Cosmic Harmonics; The Implications of the Angular Power Spectrum Peaks; Evidence of Harmonics in Large-Scale Structure.*

   (Alan Guth at desk.)