ISP 205 Review Questions, Week 15

This is not required homework. It will not be graded. Answers will be supplied on Tuesday.

- 1. What force tries to slow down the rate of expansion of the universe?
- 2. How do we know that the rate of expansion of the universe is speeding up (accelerating)?
- 3. What causes the acceleration?
- 4. What fraction of the total content of the universe is in the form of Dark Energy?
- 5. What fraction of the total content of the universe is in the form of Dark Matter? Of all kinds of matter put together?
- 6. How do we know that the universe has a "flat" geometry?
- 7. What are the three problems that occur if we just try to extrapolate the nature of today's universe back to the earliest times?
- 8. What do we mean by inflation?
- 9. How does inflation solve the three problems referred to in question (7)?
- 10. What will happen to the universe in the long-term future?