

Physics 130 General Relativity Seminar

Assignment 12 April 14, 2011

Part 1: Readings

Cheng: Chapter 11 - Pages 237-278(Inflation and the Accelerating Universe)

Amanda Peet GR Lectures - Appropriate pages.

Other sources among references on website or books in my office.

Part 2: Review Questions from Text

1. Cheng: 11-1, 11-2, 11-3, 11-4, 11-5, 11-6, 11-7, 11-8, 11-9, 11-10, 11-11, 11-13, 11-15

Part 3: Everyone Make sure that you have read Moffat's (easy) book completely.

Part 4: Extra Problems

1. Cheng: 11-2 Epoch-dependent Hubble's constant and $a(t)$ _____
2. Cheng: 11-3 Luminosity distance/redshift in flat universe _____
3. Cheng: 11-4 Negative Λ and the "big crunch" _____
4. Cheng: 11-5 Estimate of matter/dark energy equality time _____
5. EP #66 - Flat Dust Universe _____
6. EP #67 - Particle Horizon in Flat Dust Universe _____
7. EP #73 - Equation of State _____
8. EP #74 - Flat Universe with Period of Inflation _____