CHAPTER 8: INTERFERENCE

Reading:
Chapter 8 of Blandford and Thorne.

TA:
The TA for this problem set is Alexander Putilin

Problems

DUE DATE: Wednesday 22 November – to be handed in along with your solutions for Chapter 7. Class on this date will begin 45 minutes later than usual, at 1:45PM.

NOTE: If any problem is trivial for you, do not do it. Simply state that it is trivial and pick some other problem to do instead, or make up your own problem related to the chapter.

A. Work **both** of:
   - Exercise 8.2, Lateral coherence of solar radiation
   - Exercise 8.4, Longitudinal coherence of radio waves

B. Exercise 8.5, Microwave background radiation

D. Work **one** of:
   - Exercise 8.9, Reciprocity relations for an optical device. Work only parts (a), (b), and (d). [Parts (c) and (e) are not particularly hard; I'm just trying to keep the length of this problem set plus set 7 reasonable.]
   - Exercise 8.10, Antireflection coating