CHAPTER 11: Elastodynamics

Reading:

Chapter 11 of Blandford and Thorne. Note: Section 11.2 and Box 11.1 play no significant role in this chapter but will be important foundations for fluid mechanics and plasma physics. Thus, you don't need to pay a lot of attention to them now.

TA:

This problem set will probably be graded by Xinkai Wu.

Problems

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. Exercise 11.3 Dispersion of Flexural Waves
B. Exercise 11.4 Speeds of Elastic Waves
C. Exercise 11.5 Xylophones
D. Exercise 11.7 Reflection and Transmission of Normal, Longitudinal Waves at a Boundary
E. Exercise 11.8 Earthquakes