CHAPTER 6: GEOMETRICAL OPTICS

Reading:

Sections 6.3-6.6 of Blandford and Thorne

Chapter 6 is available at http://www.pma.caltech.edu/Courses/ph136/ph136.html

As usual, most of the applications are in Example Exercises. You should read these examples whether or not you attempt to solve them.

TA:

The TA for this problem set is Xinkai Wu.

Problems

NOTE: For students who have had enough prior experience with statistical mechanics that some or all of the problems assigned below are not a useful learning experience: Do **not** waste your time working such problems. Instead, pick other problem(s) that are useful for you.

A. Exercise 6.4 (Sound Waves in a Wind).
B. Exercise 6.5 (Self-Focusing Fibers)
C. Exercise 6.6 (Geometrical Optics for the Schrödinger Equation)
D. Exercise 6.8 (Matrix Optics for a Refracting Telescope)