## Physics 7502: Homework Set No. 4

## Due date: Tuesday, Feb. 9, 2016, 5:00pm in PRB M2039 (Bowen Shi's office)

## Total point value of set: 100 points

**Problem 1 (5 pts.):** Exercise 13.1.4 (Shankar, p. 357)

**Problem 2 (10 pts.):** Exercise 13.1.5 (Shankar, p. 359)

**Problem 3 (5 pts.):** Exercise 13.3.1 (Shankar, p. 366)

**Problem 4 (5 pts.):** Exercise 13.3.2 (Shankar, p. 366)

**Problem 5 (10 pts.):** Exercise 13.4.1 (Shankar, p. 371)

**Problem 6 (10 pts.):** Exercise 13.4.2 (Shankar, p. 371)

**Problem 7 (5 pts.):** Exercise 13.4.3 (Shankar, p. 371)

**Problem 8 (5 pts.):** Exercise 14.3.3 (Shankar, p. 384)

**Problem 9 (5 pts.):** Exercise 14.3.5 (Shankar, p. 385)

**Problem 10 (15 pts.):** Exercise 14.3.7 (Shankar, p. 385)

**Problem 11 (5 pts.):** Exercise 14.3.8 (Shankar, p. 385)

**Problem 12 (20 pts.):** Exercise 14.4.3 (Shankar, p. 396)