# PHY1308 - Homework 6

Expectations for the quality of your handed-in homework are available at <u>http://www.physics.smu.edu/sekula/phy1308/homework.pdf</u>. Failure to meet these guidelines will result in loss of points as detailed in that document. **This assignment is due on Friday, Mar. 11 by 5:00pm (please place it in Prof. Sekula's mailbox in FS102)** 

#### Reading Assignment

• Chapter 25

#### **Practice Problems**

These are not required; they are odd-numbered problems from Wolfson that may help you to warm up for the required problems.

- CH25-19
- CH25-21
- CH25-27
- CH25-35
- CH25-75

## A Note on Significant Figures

Wolfson's representation of numbers can often make interpreting the number of significant figures very difficult. Here are some rules you can follow, and which the solutions will adhere to:

- 1. If an integer number has a trailing zero (e.g. 50 or 100), but no decimal point to indicate that zero is significant, TREAT THE TRAILING ZEROS AS SIGNIFICANT.
  - a) Example: 100 will have three significant figures. 50 will have two.
- 2. If an integer less than 10 is given, assume it is INFINITELY SIGNIFICANT
  - a) Example: 2 has infinite precision, and should be treated like 2.0000000...

### **Required Problems**

- CH25-18 (5 Points)
- CH25-20 (5 Points)
- CH25-24 (10 Points)
- CH25-26 (10 Points)
- CH25-36 (10 Points)
- CH25-44 (10 Points)
- CH25-64 (30 Points)
- CH25-76 (20 Points) read problem CH25-75 first!