Physics 3201
Problem Set 13, Problem 4 modified on 11/27/13

Due: *Friday, December 6* (the last day of classes). This problem set has a total of 8 problems, since it spans a 2-week period. Most are not very difficult, though. Solutions will be posted at mid-day on Saturday, December 7.

Notes: This problem set covers Chapters 5 and 6 of Griffiths. Read them!

Final exam: Scheduled by the registrar for Friday, Dec. 13 at 8-10 AM in MSB 407. It will be a cumulative exam with about 5-6 problems. You will be allowed to bring a single page of notes. Additionally, copies of the reference formulas on the inside covers of Griffiths will be available.

1. Griffiths Problem 5.15 (Problem 5.14 in 3rd Ed.)

2. Problem 5.25 (Problem 5.24 in 3rd Ed.). Be sure to answer the question regarding uniqueness — it's easy, if you think about it for a few moments.

3. Problem 5.26, part (b) only (Problem 5.25(b) in 3rd Ed.)

4. Problem 5.37, part (b) only (5.36 in 3rd Ed.). Note the relation to Problems 5.6 and 5.12, which you have already done.

5. Problem 6.1

6. Problem 6.7. Once you have found **J** and **K**, note the mathematical resemblance to a solenoid to save yourself some work.

7. Problem 6.12

8. Problem 6.17

Honors: Problem 5.22 (5.21 in 3rd Ed.). The last meeting of honors students will be on Dec. 6th, at 1:30 PM in room P302S.