

PHY 712 Electrodynamics
11-11:50 AM MWF Olin 107

Plan for Lecture 13:


Continue reading Chapter 5

A. Magnetic dipole fields

B. The hyperfine Hamiltonian

Course schedule for 2013

(Preliminary schedule -- subject to frequent adjustment.)

| | Date | JDJ Reading | Topic | Assign. | |
|---|------------|-------------|--|-----------------------------------|------|
| 1 | 01-16(Wed) | Chap. 1 | Introduction, units and Poisson equation. | #1 | |
| 2 | 01-18(Fri) | Chap. 1 | Electrostatic energy calculations | #2 | |
| | 01-21(Mon) | No class | MKL Holiday | | |
| 3 | 01-23(Wed) | Chap. 1 | Poisson Equation and Green's Functions | #3 | |
| 4 | 01-25(Fri) | Chap. 1 & 2 | Green's Theorem and Functions | #4 | |
| 5 | 01-28(Mon) | Chap. 1 & 2 | Brief introduction to numerical methods | #5 | |
| 6 | 01-30(Wed) | Chap. 2 | Method of images | #6 | |
| 7 | 02-01(Fri) | Chap. 3 | Cylindrical and spherical geometries | #7 | |
| 8 | 02-04(Mon) | Chap. 4 | Multipole moments | #8 | |
| 9 | 02-06(Wed) | Chap. 4 | Dipoles and dielectrics | #9 | |
| 10 | 02-08(Fri) | Chap. 4 | Microscopic and macroscopic polarizability | | |
| 11 | 02-11(Mon) | Chap. 5 | Magnetostatics | #10 | |
| 12 | 02-13(Wed) | Chap. 5 | Magnetostatic fields | | |
|  | 13 | 02-15(Fri) | Chap. 5 | Magnetic dipole fields | Exam |
| | 14 | 02-18(Mon) | Chap. 5 | Permeable media | Exam |
| | 15 | 02-20(Wed) | Chap. 6 | Maxwell's equations | Exam |
| | 16 | 02-22(Fri) | Chap. 6 | Poynting vector and stress tensor | Exam |