Instructor
David Goldberg (goldberg@drexel.edu)
Office: Disque Hall, Room 810
Phone: (215) 895-2715
Office Hours: By Appointment
Lectures
T, Th 11-12:30
Disque 919
Textbook
Classical Electrodynamics, 3rd Ed. J.D. Jackson. Yes, the correct edition is important.
Course Webpage
I will make certain materials available, including images, links, and occasional examples, available on the course webpage:
http://www.physics.drexel.edu/courses/Physics-511/
Course Overview
This course is intended for graduate students in physics (or very closely related disciplines). It is the first course in a two-term sequence on classical electromagnetism. It is assumed that you have seen undergraduate E&M at the Griffiths level, but nevertheless, we will begin at the beginning.
We will cover statics, boundary value problems, multipole expansion, Maxwell’s equations, Conservation laws, electromagnetic waves, and will conclude (ideally) with radiation. It is my goal to finish up to chapter 6 in Jackson, and you’ll pick up at that point in the next term.
Grading Policy
• 10% – Class Participation: Attendance is required, and is expected you are on time every day. This is a small class, so absences will be noticed. And as you all probably already know, I am a stickler for punctuality, so be on time!
• 25% – Homework: Homeworks will be assigned once per week (handed out on Thursdays). They are due the next Thursday at the beginning of class. You may discuss the assignments with your friends, but the work you submit must be your own.
• 25% – Midterm Exam: At approximately Week 6, we will have an in-class midterm exam. It will be closed book.
• 40% – Final Exam: We will have a closed-book, comprehensive final exam during exam period.