

July 14, 2007

Research Advisory Committees

The purpose of your Research Advisory Committee is to provide guidance on coursework and thesis topic so as to ensure that you are broadly trained as a physicist and **complete your dissertation in a timely fashion.**

Your responsibilities as a Graduate Student

After you select a research advisor and pass the written Preliminary Examination, which normally should both occur in June after your first year of graduate study, or, at the latest, before the end of the second year of graduate study, the Graduate Committee appoints your Research Advisory Committee. The Research Advisory Committee (RAC) is composed of your advisor and two additional faculty members. With respect to the RAC, your responsibilities are:

1. **Preliminary Orals.** Within 12 months after passing the written Preliminary Exam, you should submit to your committee a written research plan, which you should then defend orally before the committee. The written document should be 5-10 pages long. It should include a review of relevant literature, a statement of the specific goals of the project, and a tentative outline of the tactics you will use to reach the goal. You must give the report to your committee with sufficient lead time that they can read it prior to your meeting. At the meeting, you should be prepared to give a 20-30 minute oral summary of the written material, with viewgraphs. A Powerpoint presentation can be made in lieu of, or as a supplement to, viewgraphs.
2. **Determination of course requirements.** PhD candidates must take PHYS 711(Classical Mechanics), PHYS 712(Electromagnetism), PHYS 741,742(Quantum Mechanics), and PHYS 770(Statistical Mechanics) unless satisfactorily completed elsewhere. In addition, you must complete 3 additional courses at the graduate level, of which at least one must be in Physics. It is the responsibility of your Research Advisory Committee to determine the additional courses you need for the PhD, such as Advanced Quantum Mechanics, Solid State Physics, General Relativity, Nonlinear

Optics, Math or Computer Science, Medical Engineering, etc . It is important that these course recommendations be available prior to the start of Fall classes.

Annual report to your RAC. Following successful completion of your Preliminary Oral examination, your RAC should meet with you once a year. The deadline for this meeting is August 29, 2007 – the first day of Fall 2007 classes. It would be helpful to schedule the meeting earlier rather than later within the scheduled. Prior to the annual meeting of your committee, you should prepare for the committee a written report outlining your research accomplishments to date, additional research still needed, a schedule of what you will accomplish in the next 12 months. The report should be at least 5 pages long (double-spaced) and should be given to your committee several days in advance of the meeting so that members can read it prior to the meeting.

Responsibilities of the Research Advisor. The student's research advisor, who is also the RAC chair, must call the annual meetings described above and to send a report of the graduate student's progress to the Graduate Committee. The report should note courses that the student still needs to take, major changes in the research plan from the prior year's plan, and the likely date for completion of the dissertation. A copy of the student's report should be attached to the RAC report. Reports are due September 10.

Responsibilities of the Graduate Committee. The Graduate Committee will evaluate the progress of each graduate student in September.