Choosing a Graduate School in Physics and Related Disciplines

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Assumptions

- You **have decided to apply** to graduate school in physics or a related discipline.

- Your undergraduate major is physics.

- You understand that through a teaching/research assistantship and tuition/fee waivers **you will not have to pay** for your graduate education.

- You think that **the most “mysterious” parts** of the process are
  - Selecting the schools to apply to, and
  - Choosing the school to attend.
Choosing the Graduate Schools to Apply to
What to Look For in a Graduate Program

- Strength in a particular area (some universities with less “name recognition” have top programs in specific areas)

- Strength across the discipline of physics and in related departments

- Access to specialized facilities (telescopes, accelerators, national laboratories)

- Structure of the program (course work, qualifying exam, teaching obligations, length of time to degree, thesis defense procedures)

- Geographical location and university setting
Selectivity of Graduate Programs

- Aspects of Selectivity:
  - **Admissions criteria** (quality of your undergraduate preparation, letters of recommendation, all GRE scores, research experience)
  - **Chance of being admitted** (percent admitted, GRE scores of admitted students, success of prior applicants from your school, contacts with faculty at the graduate school)

- General Advice:
  - You should apply to schools that represent various levels of selectivity, *i.e.*, where your chances of being admitted range from excellent to fair.
Gather Information

- Check department and faculty websites
- AIP book: *Graduate Programs in Physics, Astronomy, and Related Fields*
- GradSchoolShopper.com
- Email departments and current/past graduate students
- Talk to physics professors at your undergraduate institution
- Visit some graduate schools
Choosing the Graduate School to Attend
Study Each Offer of Admission

- Amount of teaching and/or research obligation

- Arrangement for choosing your thesis advisor (some programs offer more flexibility than others)

- Possibility of support to perform research the summer following your first year

- Possibility of deferring admission for a year

- Possibility of performing research the summer before you enroll
Program That Best Meets Your Needs

- Overall strength and strengths in specific areas
- Structure of the program (course work, research, support mechanisms, length of time to degree, PhD graduation percentage, specialized facilities)
- Geographical location, university setting, opportunities for your “significant other”
- Intangibles (graduate student community, climate for women and minorities, faculty-student relationships)
Visit Most Promising Schools

- Departments will usually help pay for a visit

- Visit on the department’s “visit day.” If you visit at another time, make arrangements to see people ahead of time.

- Talk to professors and graduate students in your areas of interest

- Stay overnight and find out:
  
  **Student satisfaction** with course offerings, classroom instruction, and thesis experience

  **Track record** for placing students after they receive their PhD

  General level of **happiness** of students and faculty
Making the Final Decision

- Don’t put much emphasis on the financial offer (they tend to be similar and in accordance with the cost of living)

- Avoid allowing “name recognition” to influence your decision too much

- Determine how well the available research environment matches what you are interested in and excited about

- Think seriously about your career goals and concentrate on how well your long-term needs will be satisfied

- Don’t stress out about two close choices – either will be fine
Resources
AIP book: *Graduate Programs in Physics, Astronomy, and Related Fields* (sent to all undergraduate departments)

- GradSchoolShopper.com

- AAPT provides a good resource for applying to and choosing a graduate school. *Planning for Graduate Studies*: http://www.aapt.org/Resources/students.cfm

- Your undergraduate professors (talk to them!)

- This webinar available at: http://www.aps.org/careers/guidance/webinars/gradschool.cfm