I Got into Grad School, and You Can Too!

Tom Boettcher

April 7, 2015
Grad school is not the only option!

- Physics grads are typically very employable
- No matter what, work on building a skill set
About me...

- Applied to grad schools this year
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- Interested in experimental particle physics
About me.

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- Interested in experimental particle physics
- Domestic, white male
Freshman and Sophomore Year
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- START RESEARCH ASAP!
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- Get good grades (duh?)
Freshman and Sophomore Year

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- Get to know the department (attend office hours, join Physics Club, etc.)

- Get good grades (duh?)

- Get involved in any outreach that sounds fun
Start thinking about which courses you should be taking. For example, Berkeley expects . . .

- 3 semesters- General Physics (P221, P222, P301)
- 1 semester- Mechanics (P441, P442)
- 2 semesters- Electromagnetism and Optics (P331, P332, P460)
- 1 semester- Thermal/Statistical (P340)
- 2 semesters- Atomic Physics and Quantum Mechanics (P453, P454)
- 2 semesters- Advanced Undergraduate Laboratory (P309, P451)
- Vector calculus (M/S311, M/S312)
- Linear algebra (M/S303)
- Ordinary and partial differential equations (M/S343, M/S344, M441, M442)
- Complex variables (M/S415)
Junior Year
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- Continue (or start) doing research!
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- Continue (or start) getting good grades!
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- Try to do some research away from IU (REU, SULI)
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- Try to do some research away from IU (REU, SULI)
- Prepare for the PGRE
Average accepted PGRE score by school
domestic white males, 2008–2010
Preparing for the PGRE


Respect the test, don't fear it!
Preparing for the PGRE

- Read Conquering the Physics GRE by Yoni Kahn and Adam Anderson
Preparing for the PGRE


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Conquering the Physics GRE

A review of GRE-specific topics
Includes 3 full-length practice exams and complete solutions

Respect the test, don’t fear it!
Senior Year
The Application Process

In general, you’ll need…

- Transcript
- Test scores (PGRE, GRE, TOEFL for international students)
- CV (not always)
- Course and textbook list (not always)
- 3 letters of recommendation
- Statement of purpose
Statement of Purpose

The DOs...

▶ Sell your research skills
▶ Be specific about your interests
▶ Talk about specific professors you want to work with and why
▶ Get as many people to read it as possible!

The DON'Ts...

▶ Don't tell stories from kindergarten
▶ Don't say you want to work with a professor who is leaving
▶ Don't overshare

If a school asks for a personal/diversity statement, keep it short unless you actually have something to say. Don't offend anyone!
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Other Things to Consider
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Deciding where to apply
  ▶ Talk to professors in the field your interested in
  ▶ Rankings can be a guide, but they don’t tell the whole story

Apply for external funding
  ▶ NSF GRFP
  ▶ DOE SCGF
  ▶ DOD NDSEG
  ▶ Hertz Fellowship
Some useful resources

- physicsgre.com (forum dedicated to the PGRE and grad school admissions)
- gradschoolshopper.com (admissions statistics and information)
- grephysics.net (worked solutions to PGRE practice tests)
- thegradcafe.com (admissions results, info on living in various cities)