Applying to Graduate School & REU Programs (especially UNC’s!)

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THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL
Why go to grad school?

- learn how to solve unsolved problems
- learn how to test whether you’re right
- learn teamwork and professional skills
- learn how to work independently and manage a long-term project
- learn more (astro)physics!
UNC P&A Grad Program

- diverse research: telescope instrumentation, astroinformatics, numerical astrophysics, observational astrophysics, nuclear/particle astrophysics, cosmology & general relativity...
  (+ condensed matter, bio/medical physics, fluid dynamics, quantum theory, string theory...)
- unique facilities: SOAR/SALT/SkyNet, TUNL, KillDevil, RENCI/SILS, BRIC
- professional development: teaching, proposal writing, speaking, non-academic careers
- great place to live!
Application Elements

- Grades
- GRE (grad school)
- Letters of Recommendation
- Personal Essay
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break to discuss REU programs
GRE General Test

- Studying will increase your scores a LOT
- Free practice exams and study tips online: http://www.ets.org/gre/revised_general/prepare/
- Manage test anxiety:
  → practice self-affirmation
  → embrace “good” stress
- Focus on the Verbal & Quantitative tests, not the Writing test
GRE Physics test

- Studying will increase your scores a LOT
- Free practice book online: http://www.ets.org/gre/subject/about/content/physics
- WATCH OUT: big gap between Oct/Nov & April test dates
- Even if you score low, you can still get into schools that require the Physics GRE if your grades & research are strong
GRE Physics test

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- Free practice book online:
  [http://www.ets.org/gre/subject/about/content/physics](http://www.ets.org/gre/subject/about/content/physics)
- Tips from a GRE physics question-writer:
- WATCH OUT:
  big gap between Oct/Nov & April test dates
- Even if you score low, you can still get into schools that require the Physics GRE if your grades & research are strong

**time to discuss REU programs**
Highlights of discussion:

- astronomy REUs are coordinated, with a common Feb. 1 application deadline and Mar. 1 first-round admission deadline (physics REUs are not coordinated)
- there may be 200-300 applications for 10 slots - you can help your case if you can argue you have “limited opportunities for research” at your current institution (this could be based on a specific scientific subfield being missing at your school)
- the CAP (Computational Astronomy & Physics) program at UNC will be on hiatus this coming summer; Northwestern’s CIERA program offers a similar computational emphasis; Rutgers’ REU program offers a similar broad mix of astronomy and physics
- to stand out from the pack, you need a memorable essay
The Personal Essay

- See handout on personal statements
  (also http://owl.english.purdue.edu/owl/resource/642/01/)

- **Exercise:** Work with a partner to come up with your “story” - try to brainstorm 3 possible angles reflecting your unique approach to science/research/your career.

**Remember:**
- your “story” ≠ your life story
- be memorable, but “be yourself” has limits
- turn weakness into strength
  (“grit” is a big plus! consult advisors & letter writers on strategy)