

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

Sheila Kannappan

Chair of Graduate Admissions

Director of CAP REU Program

Associate Chair for Diversity

Department of Physics & Astronomy



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

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

Sheila Kannappan

Chair of Graduate Admissions

Director of CAP REU Program

Associate Chair for Diversity

Department of Physics & Astronomy

my emphasis



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, RENCIS/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

Application Elements

- ▶ Grades
- ▶ GRE (grad school)
- ▶ Letters of Recommendation
- ▶ Personal Essay

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>

- Tips from a GRE physics question-writer:

http://blogs.discovermagazine.com/cosmicvariance/2009/10/22/an-inside-look-at-the-physics-gre/#.Vf4Zs_lVikp

- **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

- Studying will increase your scores a LOT
- Free practice book online:

<http://www.ets.org/gre/subject/about/content/physics>

- Tips from a GRE physics question-writer:

http://blogs.discovermagazine.com/cosmicvariance/2009/10/22/an-inside-look-at-the-physics-gre/#.Vf4Zs_lVikp

- WATCH OUT:

big gap between Oct/Nov & April test dates

- Even if you score low, get into schools that require + if your grades & research are s

time to
discuss REU
programs

[Slides on individual REU programs have been removed, but you can browse NSF-funded REUs here: http://www.nsf.gov/crssprgm/reu/reu_search.jsp]

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)