

This is all about

- Clarifying the process of applying to graduate school in physics
- Ways of getting involved in research and hence figuring out if you are interested in graduate school
- Answering the question(s) “what do graduate students do?” and “what do they think about it.”
- Answering any other questions you may have.

How do you know if you want to go to graduate school in physics?

Grad School is mainly about RESEARCH

If you know you want to do research either in academia, or in industry, then apply.

If you don't know about research, there are MANY opportunities to try it.

The best way to do
some research is to bug
the physics faculty.

Try different projects

If you are interested in physics research, or simply think you might be, try it out!

[http://www.compadre.org/
student/research/](http://www.compadre.org/student/research/)

has a good listing

Having decided to go to
graduate school, where
is the \$ moola \$ going
to come from?

You **SHOULD** apply for external funding
because...

- Attempting to formulate your research interests will help you clarify them.
- With independent funding it is easier to get a job in the research lab of your choice.
- You *might* actually win a fellowship!

Everyone should apply for this one.

<<http://www.nsfgrfp.org/>>

GRFP Fellows Receive the Following:

- Three years of support
- \$30,000 annual stipend
- \$10,500 cost-of-education allowance
- \$1,000 one time international travel allowance
- [TeraGrid](#) Supercomputer access



The banner features the NSF logo on the left and the text "National Science Foundation Graduate Research Fellowship Program" on the right. Below the banner is a collage of six images showing diverse graduate students in various research settings: a student in a lab coat working with equipment, a student holding a petri dish, a student in a lab coat, a student in a lab coat, a student in a lab coat, and a student in a lab coat.

Program Overview

The National Science Foundation (NSF) Graduate Research Fellowships are three-year fellowships for graduate study leading to research-based master's or doctoral degrees in the science, technology, engineering, or mathematics fields.

The purpose of the NSF is to ensure the vitality of the human resource base of science, technology, engineering and mathematics in the United States and to reinforce its diversity. Working towards that goal, each year the NSF awards approximately 1,000 new three-year graduate fellowships.

The NSF welcomes applications from all qualified students and strongly encourages women, minorities, and persons with disabilities to apply for this fellowship.

Fellowship Benefits and Conditions

This fellowship provides an annual \$30,000 stipend and \$10,500 cost-of-education allowance. Fellows may choose any appropriate, accredited, non-profit United States institution or relevant international institution offering advanced degrees in science, technology, engineering, and mathematics. Fellows are required to engage in full-time programs leading to research-based graduate degrees in disciplines supported by the NSF.

Application Process

For official information, go to www.nsf.gov/grfp

For application assistance, go to www.nsfgrfp.org

To apply, go to www.fastlane.nsf.gov/grfp/

WEB: www.fastlane.nsf.gov/grfp/ EMAIL: info@nsfgrfp.org PHONE: 1-866-NSF-GRFP

For the Applied folks

-with a very good record

<http://www.hertzfoundation.org/>

Successful applicants have the choice of two Fellowship options:

Option 1 - Five Year Hertz

- \$31,000/ 9-month personal stipend*
- Full tuition equivalent
- Renewable for up to 5 years

Option 2 - Five-Year Coordinated Hertz Period - Two Years

- \$36,000/ 9-month personal stipend*
- Full tuition equivalent

Other Fellowship Period - Up to Three Years

- \$3,500/ year supplemental stipend* from Hertz
- Requires Awardee to accept a 3-year Fellowship from another source



The Hertz Foundation builds America's capacity for innovation by nurturing remarkable applied scientists and engineers who show the most promise to change the world.

Join a community of innovators...

We are looking for:

- Exceptional creativity
- Broad understanding of physical principles
- Outstanding potential for innovative research
- Applying to or enrolled in a PhD program
- American citizenship or permanent residency

We support research in:

- Astrophysics
- Chemistry
- Computer Science
- Earth Science
- Engineering
- Materials Science
- Mathematics
- Physics
- Quantitative Biology/Biotechnology

Apply today:

- Emphasis on near-term application of applied sciences or engineering
- Approximately 20 new Fellowships awarded annually
- Tenable at most top-level U.S. research universities
- Two options available, chosen at time of award

Graduate

FELLOWSHIPS

For Innovators in the Applied Physical, Biological, and Engineering Sciences

Option 1: Five-Year Hertz

- \$31,000/9 month Personal Stipend*
- Full Tuition Equivalent
- Renewable for up to 5 years

Option 2: Five-Year Coordinated

Hertz Period—Two Years

- \$36,000/9 month Personal Stipend*
- Full Tuition Equivalent

Other Fellowship Period—Up to Three Years

- \$3,500/year Supplemental Stipend* from Hertz Foundation
- Requires Awardee to accept 3-year Fellowship from another source

*\$5,000/yr for dependent child care

Application deadline:
October 30, 2009

Apply online at:
www.hertzfoundation.org

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Churchill Scholarship

At least fourteen Churchill Scholarships, are offered annually.

The Churchill Scholarship is worth between \$44,000 and \$50,000, depending on the exchange rate.

It covers all University and College tuition and fees (currently about \$25,000). In addition, students receive a living allowance of £10,000 if enrolled in a nine-month academic program and £12,000 if enrolled in a full-year academic program. They also receive an allowance of up to \$1,000 for travel to and from the United Kingdom.

Some Resources

- http://www.physics.purdue.edu/resources/graduate_funding.shtml
- http://scipp.ucsc.edu/~profumo/service/grad_fund.pdf
- A new wiki hosted at the UO??

**Some cool
opportunities**

WHY PSI?



Perimeter Scholars International (PSI) is a 10-month intensive Master's level course held at Perimeter Institute for Theoretical Physics, a leading international research centre in Waterloo, Ontario, Canada.

PSI is designed to prepare outstanding students from around the world for cutting edge research. The syllabus exposes students to the whole spectrum of theoretical physics through a stellar array of international lecturers as well as dedicated professional tutors. Graduates receive a Master's Degree in Physics from the University of Waterloo and a Perimeter Scholars International Certificate from Perimeter Institute.

FULL FINANCIAL SUPPORT

Students accepted into PSI are eligible for full scholarships covering all expenses, including:

- Full tuition
- Accommodation
- Books and materials
- Health Insurance
- Return transportation
- Living stipend
- Meals
- Laptop



APPLY TO PSI

PSI welcomes applications from exceptional students with an undergraduate honours degree in Physics, Math, Engineering or Computer Science with a minimum of 3 upper level undergraduate or graduate courses in Physics. PSI recruits a diverse group of students and especially encourages applications from women.



OUTSTANDING FACULTY

John Berlinsky, PSI Director

Neil Turok, Director, Perimeter Institute

2009-10 Faculty Includes:

Niaresh Afshordi
Perimeter Institute
Ben Allanach
Cambridge University
Philip Anderson
Princeton University
Nima Arkani-Hamed
Institute for Advanced Study
Katrin Becker
Texas A&M University
Melanie Becker
Texas A&M University

Carl Bender
Washington University
Freddy Cachazo
Perimeter Institute
Matt Choptuik
University of British Columbia
Sue Coppersmith
University of Wisconsin at Madison
David Cory
MIT
Kari Dalnoki-Veress
McMaster University

François David
Institut de Physique Théorique,
CEA-Saclay
Jaume Gomis
Perimeter Institute
Daniel Gottesman
Perimeter Institute
Ruth Gregory
Durham University
Leo Kadanoff
University of Chicago
Luis Lehner
Perimeter Institute &
University of Guelph

Renate Loll
Universiteit Utrecht
Rob Myers
Perimeter Institute
Hiranya Peiris
Cambridge University
Malcolm Perry
Cambridge University
Michael Peskin
SLAC
Frans Pretorius
Princeton University
Sid Redner
Boston University

Anders Sandvik
Boston University
Erik Sorensen
McMaster University
Robert Spekkens
Perimeter Institute
Andrew Tolley
Perimeter Institute
David Tong
Cambridge University
Xiao-Gang Wen
MIT



APPLY TO PSI
PROGRAM INFORMATION AND ONLINE APPLICATIONS AT:
perimeterscholars.org

**The deadline for applications
is February 1, 2010**



For the mathematically inclined:

Part III of the Mathematical Tripos

in

Cambridge

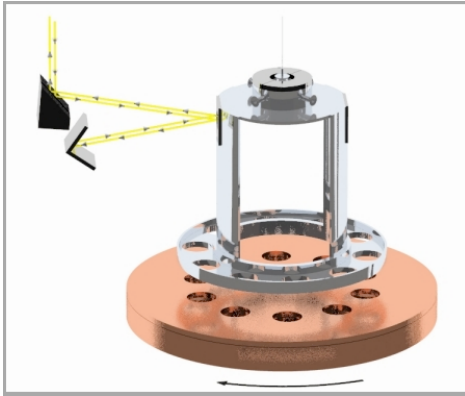
Obtain a Master of Advanced Study degree

You come to me with the question

“I know am interested in experimental gravitational
physics. Who does that anymore?”

To which I would reply...

The Eöt-Wash Group at UW



LIGO at Michigan, Caltech, MIT



**Neil Cornish at Montana State
Penn State**

- Center for Gravitational Wave physics
- Institute for Gravitation and the Cosmos

Or you may ask:

“I am interested in research in optics, what programs should I be looking at?”

I have no clue!
But Dash would be a good person to ask.

Some comments

Academic jobs are incredibly competitive, largely due to lack of funding.

However there are many other reasons to go to graduate school in physics. So do not let that stop you!

Do not limit yourself by your degree!

With a bachelors in physics under your belt you can go
into

-applied math

-biology

-computer science

...

Course work counts!

If you want to into high energy theory for example (god help you) then you will be competing against students who have already taken QFT as undergraduates.

**Applying costs big
bucks!**

Choose wisely