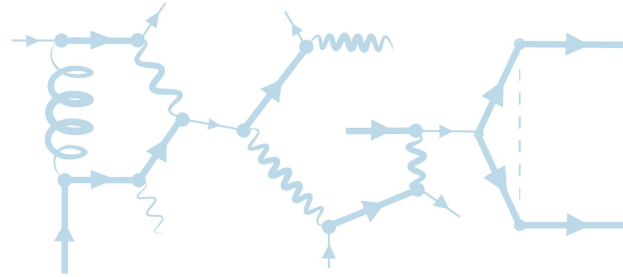


Grad Student Presentation Nevis Retreat 2019



Columbia Physics Grad Council

Representatives from Physics Graduate Council
(Apoorv, Bárbara, Ben, Elena, Luke, Roman, Sun)

On behalf of the graduate students

Outline

- Who are We?
- Review and Status of Recent Initiatives
- Grad Student Issues
 - Classes
 - Teaching
 - Quads
 - Website
 - Department Activities
 - Advising
 - Infrastructure
 - Administration
 - Diversity

Current PGC Board



President
Roman Berens



Graduate Liaisons
Guanhao Sun and Luke Krauth



Climate and Diversity Liaison
Bárbara Cruvinel Santiago



Social Chairs
Ben Gilbert and Elena Busch



International Liaison
Apoorv Jindal

What does the PGC do?

- The Physics Graduate Council serves as a formal and direct link between graduate students and the Physics Department and professors.
- The PGC unites different graduate student initiatives and leadership roles within the department.
- Formed at the start of 2017 after discussion at Nevis.
- Elections held at the start of spring semester.

Recent Initiatives

- Restructuring of PGC (from 5 to 7 members)
- Official GSAS recognition (thanks to Andrew Liu)
- Open Thesis Defenses
 - Began fall 2018
- Advising Committees
 - Third-years and above have been assigned slots by month.
- Quals
 - Creation of Quals syllabus
 - Change to Tests 5/6
- PGC has faculty advising group (Dodd, Mawhinney, Karagiorgi)
- Budget for social events
- Website (more later)

Welcome Trivia



TEAM	Round 1 Physics	Round 2 NYC & Cultural	Round 3 Entertainment	Mid-tournament Totals	Round 4 / Round 5 Geography / Arts & Science	TOTAL
IT2121	5.5	2	5.5	13	4 4	21
5 guys, 1 girl	7.5	3	8.5	19	2.5 3	24.5
Children of Christ are old	4.5	2	6	12.5	3 3	18.5
Tiberian Tigers	2.5	3	5	10.5	3 1	14.5
Barbless barbles barbarous Bards	4.5	3	6	13.5	3 4	20.5
Mean Field Theory	7	4	6	17	9 4	★30★

First Annual Summer Barbeque



First Annual Halloween Party



Giving Due Thanks

As a result of discussions over the past two years:

- Open thesis defenses have been implemented.
- Graduate advising committees have been adopted.
 - Special thanks to Prof. Christ and the rest of the Graduate Committee.
- Graduate student seminars/happy hours are still happening.
 - Thanks to Albert and Rees.
- A Quals syllabus has been drafted (though there's lots of room for improvement).
- Communication about work in Pupin has been greatly improved.
- New website!
- Colloquium has been moved to the Theory Center (after Nevis discussion) and now has food. Attendance has been much improved!

Classes

- Scientific computing and string theory are not being offered, forcing students interested in those topics to take courses at NYU.
- Request to restructure core courses to follow more standard curriculum and textbooks followed by peer institutions.
- Core courses should have TAs that to help with coursework and give a second perspective on the material. TAs should have office hours *prior* to HW due dates.
- Make field-specific course requirements more flexible, so we can substitute classes by other relevant courses signed off by the DGS and the student's research advisor.
 - Examples: allow QFT II to count for HEP theorists, biology courses for biophysicists, astronomy courses for astrophysicists, etc.

Teaching

- No cap on time TAs spend proctoring/ grading for big classes. In years with few TAs (this year) this amounts to more work than appropriate.
- Grading/proctoring should be treated like LL, HR, and Lab - if the department needs you to grade more than a set number of exams per semester, there is additional pay.
- It should be made clear to theory students during recruitment that they will have to teach over the summer and for the duration of their PhD.
- Department should hire some full time lab instructors, shift teaching so that TAs focus on teaching labs their first year and recitations their second year.
- Regrade requests for exams should be taken care of by the class instructors
 - Professors should be involved in grading their exams from time to time, and mindful that assigning an large number of midterms creates excessive work for TAs

Quals

- **Quals Town Hall**

- In order to not hijack time from other issues right now, we propose that a town hall be held next semester to ensure the department doesn't ignore much needed updates to the current structure of the exams and takes student inputs.

Website

- We have a new website!
<https://physics.columbia.edu/>
- Special thanks to the website committee:
Georgia Karagiorgi, Michael Berkowitz, Michael M Adan, Jeremy Dodd, Ana Asenjo Garcia, Luke Krauth, Bob Mawhinney, Deivid Ribeiro, Guanhao Sun, Randy Torres, Ran Zhao
- Overall very well-received.
- Googling often leads to dead links.

Department Activities

- It would be helpful to have more times assigned during the year for the faculty to listen to student issues, because only one time a year is not necessarily effective.
- We would like to expand the graduate student event budget to help foster a stronger department culture.
 - We have planned a number of new events on a small budget with great turnout and feedback.
 - The limiting component is funding for events, which would go a long way.
- More interdisciplinary talks! (Thanks for the dinosaurs!)

Advising

- Who's the new DGS? Students should get an announcement when changes like that happen.
- The DGS should be both accessible and knowledgeable about required coursework.
- The department should have spelled out expectations for 1st and 2nd year grad students. Professors and students don't know what to expect, so some students are overworked in research while taking classes and teaching.
- First-years continue to have insufficient advising. It would be helpful to have assigned academic advisors beyond research advisors.

Infrastructure

- The Machine Shop setup is (still) not ideal.
 - George Leou is retiring soon and it is unclear who is replacing him.
 - There is no formal process for getting trained.
 - Other universities have fully staffed shops where students can submit jobs to professional machinists.
 - Labs are often going to outside shops to get jobs done, which takes time and money.
- AC units in some offices could use replacement.
- Is there a better use of the computer room?

Administration

- It would be convenient to have a way for the department to pay for at least tickets and conference registration fees to take the burden away from students who have to wait a long time to be reimbursed.
 - Same applicable to labs being reimbursed from CAL.
- Suggestion for allowed expenses (rules on travel booking, hotel/meal allowances, etc.) for official/conference travel listed at a central place.

Diversity

Lots of changes compared to last year from Spectra's new initiatives to Emily and Colin's Community Round Table, but:

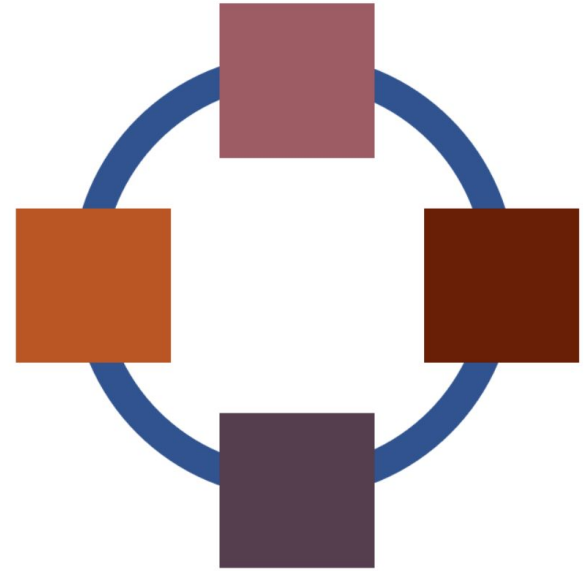
- ~14% of grad students in our department are female, but the national average is ~20%. We are way below average.
- POC are very underrepresented both among faculty and students
- Questions from students about department-led (as opposed to student-led) initiatives on recruiting a more diverse student body and faculty.
- We still haven't had an APS site visit as brought up last year.

Community Round Table Series (Emily & Colin)

The link!

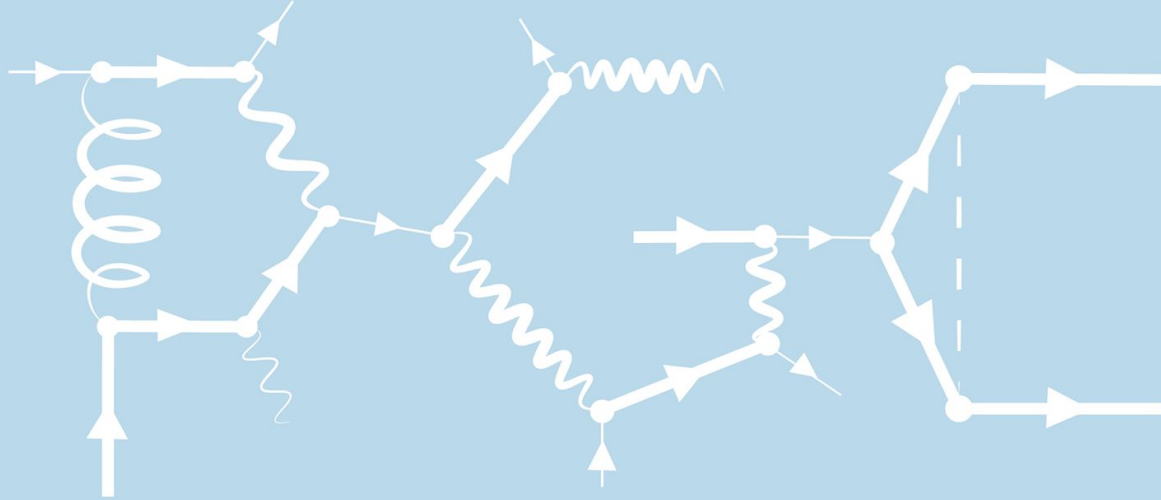
tinyurl.com/crt-suggest

CU Physics



CRT

Thank you for your time!



Columbia Physics Grad Council