

**Welcome to the**

**Physics and Applied Physics Open House**

**Yale**

# Yale Physics and Applied Physics Open House

## Thursday, March 4th

1:00-1:50pm Graduate Program Overview

2:00-3:00pm Student Groups and Yale Resources

3:30-5:00pm Research Groups (Subfields I)

*check website for  
specific research areas*

## Friday, March 5th

10:00-11:30am Research Groups (Subfields II)

4:00-5:00pm Q&A with grad students only

8:00pm Grad student social rooms

# How to learn more about Yale Physics?

**Chat box in this Zoom:** Leave questions in chat box.

**Recordings and slides:** Will be posted on website after Open House

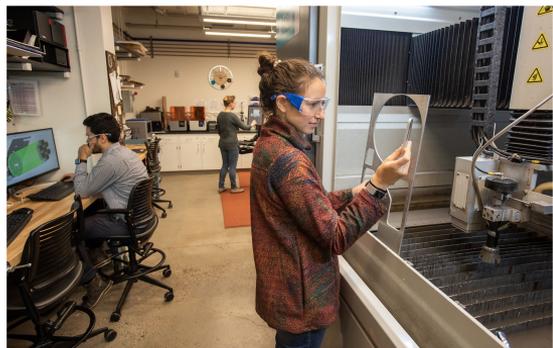
**Individual zoom/skype/phone meetings with faculty:** Please contact them directly

**Graduate student social rooms:** Talk to our current students

**Student voices videos:** <https://physics.yale.edu/academics/graduate-studies/prospective/media>

**Web site:** <https://physics.yale.edu>

# Yale Physics Graduate Program



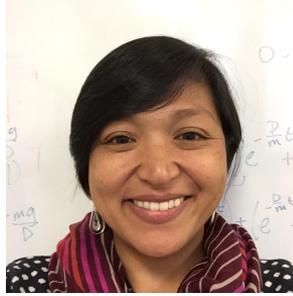
<https://physics.yale.edu>

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# Yale Physics Graduate Program Team



Prof. Bonnie Fleming  
*Director of Graduate Studies*



Dr. Rona Ramos  
*Graduate Program Coordinator  
Lecturer*



Stacey Watts  
*Graduate Registrar*



Prof. Karsten Heeger  
*Chair, Department of Physics  
Director Wright Laboratory*

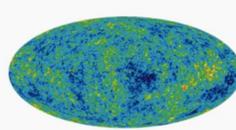
# Research Areas

**broad research portfolio in  
experiment and theory**

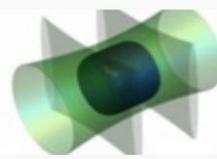
**new science initiatives  
on campus**

- quantum science
- data science
- instrumentation

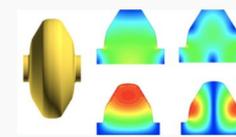
<https://physics.yale.edu/research>



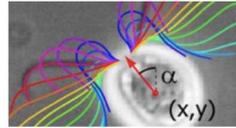
[Astrophysics](#)



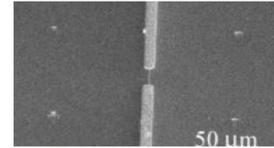
[Atomic Physics](#)



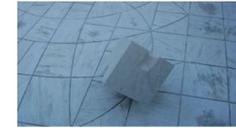
[Beam Physics](#)



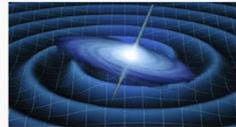
[Biophysics](#)



[Condensed Matter Physics  
Experimental](#)



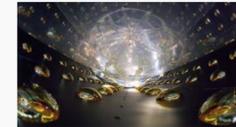
[Condensed Matter  
Physics Theory](#)



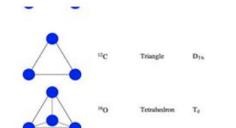
[Gravitational Physics](#)



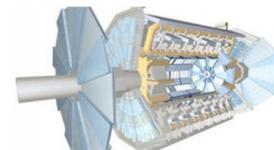
[Instrumentation](#)



[Nuclear Physics  
Experimental](#)



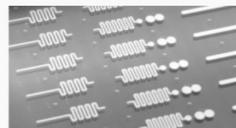
[Nuclear Physics Theory](#)



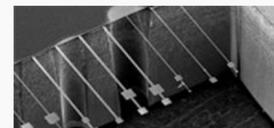
[Particle Physics Experimental](#)



[Particle Physics Theory](#)



[Quantum Information  
Physics](#)



[Quantum Optics](#)

# Yale Physics in Research Centers & Institutes



**YCAA** Yale Center for Astronomy and Astrophysics



Yale's Integrated Graduate Program In  
**PHYSICAL** and **ENGINEERING BIOLOGY**

Systems Biology Institute

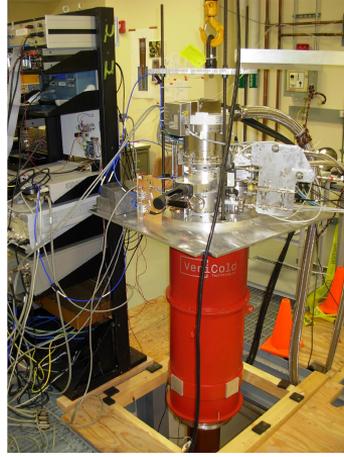
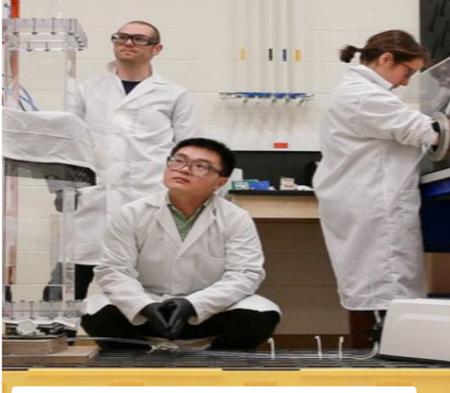


**ESI** Energy Science Institute

Quantitative Biology Institute [QBio]

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# State-of-the Art Facilities



# Yale Physics Graduate Program

## People

faculty (primary)	34
faculty (secondary)	24
grad students (physics only)	126

**Median time to graduation** 6.2 yrs

## Diverse interests/ interdisciplinary opportunities

applied physics  
astronomy/astrophysics  
biological physics/systems biology  
materials science

## Recent Alumni



<https://physics.yale.edu/people/alumni>

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# Diversity, Equity, and Inclusion

## Statement of Principles

### Respect

We continually strive to make our department a place that respects people with **diverse** backgrounds and values each others' **creativity**.

### Well-being

We commit to actively engage in creating a **supportive** and **safe environment**. Criticism and praise are professional and constructive.

### Integrity

We carry out our work with **honesty** and with the **highest standards**. We shall not commit scientific or academic misconduct, defined as plagiarism, fabrication, or falsification.

### Community

Our community actively **includes all**, enhancing **collaboration** and promoting our common mission to advance the frontiers of knowledge.



[Research & Discovery](#)



[Community & Belonging](#)



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[Education](#)



[Outreach](#)



[Get Involved](#)



[Shared Leadership](#)



[Advocacy](#)



[Legacy](#)

<https://physics.yale.edu/statement-principles>

<https://physics.yale.edu/diversity-equity-and-inclusion>

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# Academic Life and Campus Resources

## Physics Colloquia and Seminars

### Department of Physics

Home About News Research People Academics Outreach Calendar

HOME » CALENDAR

Physics Seminar Calendar	Upcoming	Month	Week	Day	Year	All Events
External Seminars of Interest	Upcoming Events					
Physics Club	NOVEMBER 21, 2019					
Prize Lectures	3:00pm	<a href="#">Mossman Seminar: Andreas Helset, NBI [via Skype], "Heavy Particle Effective Theories"</a>				

## Graduate Student Leadership

Student organizations

Graduate Student Advisory Committee (GSAC)

Graduate Student Assembly (GSA)

Town halls

Regular meetings with department leadership

Yale *Poorvu Center for Teaching and Learning*

FACULTY ▾ POSTDOCS ▾ GRADUATE STUDENTS ▾ UNDERGRADUATES ▾

Home > Initiatives > STEM Education and Evaluation > Yale Scientific Teaching Course

### Yale Scientific Teaching Course



teaching fellows  
teaching certificates

### Yale Science Diplomats



outreach  
advocacy

# Yale Campus Resources

Yale GRADUATE SCHOOL  
OF ARTS AND SCIENCES

Faculty & Staff Alumni Forms Contact Calendar New Students

Search this site

## Resources for Students



Admissions Academic Requirements Resources for Students Diversity Dean's Office

### RESOURCES FOR STUDENTS

- Finances & Fellowships +
- Advising & Mentoring +
- Teaching Support & Development
- Writing & Communication Skills
- Career Support & Development
- Conduct, Professional Ethics & Reporting Misconduct +
- Exchange Programs +
- Student Life & Community +
- Life Skills & Personal Development
- Health & Wellness
- Student Governance +
- Student Organizations
- Housing & Life in New Haven +

### RESOURCES FOR STUDENTS

At Yale, you will find an extraordinary range of resources to fuel your intellectual and academic passions, and the community and support to help sustain you as you work toward your academic goals. Libraries and labs, working groups, funding sources, mentors and advisers, health and wellness resources, and more - you will weave all of these together in ways that best fit your own needs and interests during your time as a student here.

The biggest challenge? Because Yale is a large and complex organization, many of our resources are hidden in plain sight. It may take some work and initiative to find exactly what you are looking for, but in all likelihood, it's here and you'll find it.

Below are a few resources other graduate students have found useful. We provide this as a guide, but it is far from comprehensive. Yale is constantly evolving, and every student who comes here is different. You will follow your own unique path, one that takes you where you want to go. Let's get you started.

#### Finances & Fellowships

Fellowships, stipends, conference travel funding, funding for working groups and symposia, and more: The Office of Financial Aid can answer many of your questions about funding and finances.

#### DON'T GET DISCOURAGED!

Still can't find what you're looking for? Be sure to ask people in your program, both students and staff. The [Director of Graduate Studies](#) or [program registrar](#) has worked with many graduate students and can help you find what you need. And please feel free to contact [a member of our staff](#).



McDougal Graduate Student Center

Yale GRADUATE SCHOOL  
OF ARTS AND SCIENCES

Faculty & Staff Alumni Forms Contact Calendar New Students

Search this site

## Diversity



Admissions Academic Requirements Resources for Students Diversity Dean's Office

### DIVERSITY

Office for Graduate Student Development & Diversity

- Staff & Fellows
- Edward A. Bouchet Conference +
- OGSDD Galleries +
- For Current Students +
- For Prospective Students +

→ OGSDD Fellows Application

## OFFICE FOR GRADUATE STUDENT DEVELOPMENT & DIVERSITY (OGSDD)

If you are:

- interested in applying to the Graduate School, but need more information because you aren't sure that Yale is a good fit for you
- a current student, seeking advice and support

We can help. We are committed to maintaining a supportive and inclusive academic community at the Yale Graduate School of Arts and Sciences, where students from diverse backgrounds and experiences can thrive and achieve their personal and professional goals. We look forward to meeting with you.

The Office for Graduate Student Development and Diversity (OGSDD) supports a nurturing and caring community of scholars that will welcome you, no matter who you are.

### RESOURCES

- [Afro American Cultural Center \(AfAm House\)](#)
- [Asian American Cultural Center](#)
- [Chaplain's Office](#)
- [Graduate and Professional Student Senate \(GPSS\)](#)
- [Graduate Student Assembly \(GSA\)](#)
- [La Casa Cultural: Latino Cultural Center](#)
- [McDougal Graduate Student Life Office](#)
- [Mental Health & Counseling at Yale Health](#)
- [Native American Cultural Center \(NACC\)](#)
- [Office of Career Strategy](#)
- [Office of Financial Aid](#)
- [Office of International Student & Scholars](#)

<https://gsas.yale.edu/>

<https://gsas.yale.edu/diversity>

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# Student Groups

## Climate and Diversity Committee

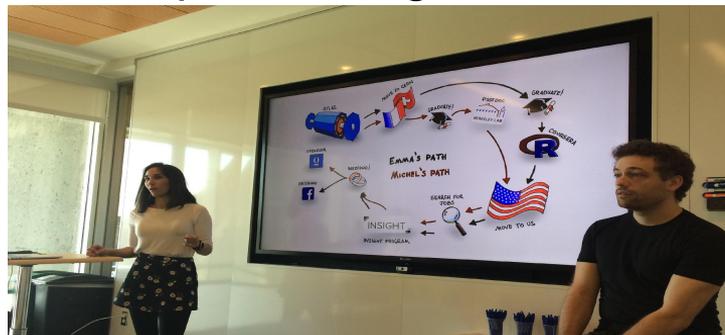


## Women in Physics (+Allies)



**Women in  
Physics +**

## Yale Physics Professional Development Organization



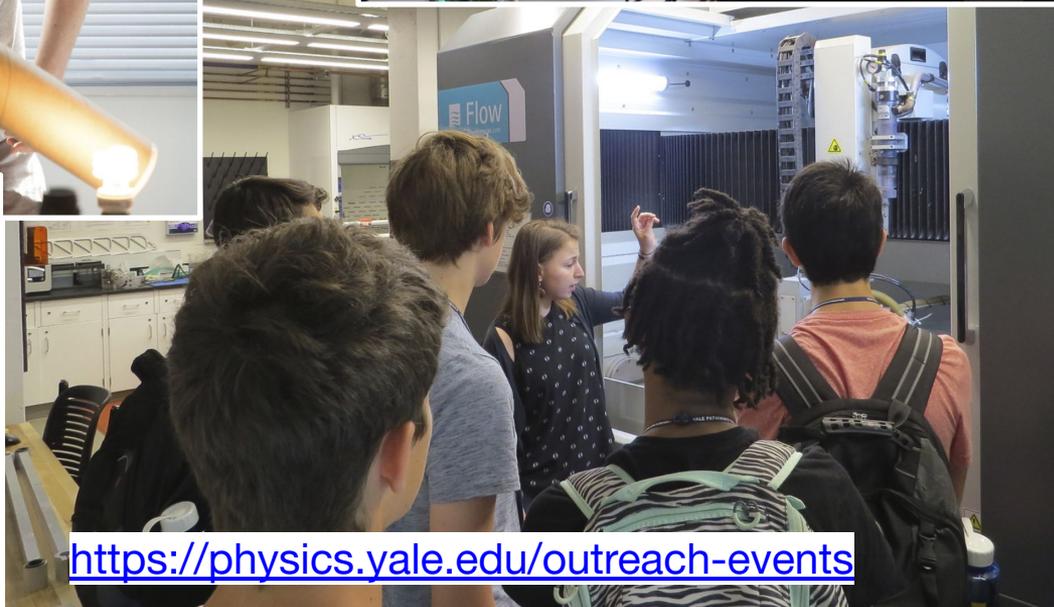
## Graduate Student Assembly



Department Social/Happy Hour  
Physics LGBTQ+

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# Outreach Opportunities



<https://physics.yale.edu/outreach-events>

# Graduate Program

- **Coursework**

- Must take 6 core courses plus one elective and a Special Investigation (research) course. Can pass out of core courses and take electives in their place.

- **Teaching**

- Typically, ~ 10hrs/week of teaching for first 2 years. (Learn to teach, deepen your knowledge of Physics!)

- **Qualifying Events**

- Four 4-question tests, taken by all students at the beginning of their second year just before fall semester. Serves as a learning milestone. For core courses not yet taken, serves as a “pre-test” learning milestone.
- Research presentation in conjunction with Special Investigations (research) course

# Graduate Program

- **Research**

- Typically start in first year, full-time in summers and when courses are complete
- By mutual arrangement, you can start summer before you start graduate school (early start - contact Stacey for applications)
- Research courses: Phys 515 seminar introduction to departmental research and research practices, Phys 990 “Special Investigations” with a research group
- Positions in research groups through research and discussions with faculty, combination of your interests and fit/space with the group

- **Flexibility in program**

- Many ways to personalize your course of study and research
- Admission to Yale does not bind you to a specific program
- Many Physics students work with faculty in other departments

# 2020-2021 Honors and Awards



Joseph Shomar won a 2020 Ford Foundation Predoctoral Fellowship



Daniel Seara selected as a "Rising Star in Soft and Biological Matter" at the University of Chicago



Sophia Hollick awarded the G. Howard Carragan Award from RPI



Charles Lomba  
Dr. Julia A. Thompson Award



Iris Ponce  
Professor Horace D. Taft Award



Ananya Rai  
Nathan Hale Associates Award

# Recent Graduate Student Alumni



**Supraja Balasubramanian**  
Postdoctoral Associate  
Fermi National Laboratory



**William Sweeney**  
Data Scientist  
VideaHealth



**Christian Weber**  
Research Associate Physics  
Brookhaven National Lab



**Estella Barbosa de Souza**  
Consultant  
Boston Consulting Group



**Shany Danieli**  
NASA Hubble and Carnegie-Princeton  
Postdoctoral Fellow  
Institute for Advanced Study



**Mengzhen Zhang**  
Postdoctoral Associate  
University of Chicago

<https://physics.yale.edu/people/alumni>



**Come and join us!**

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