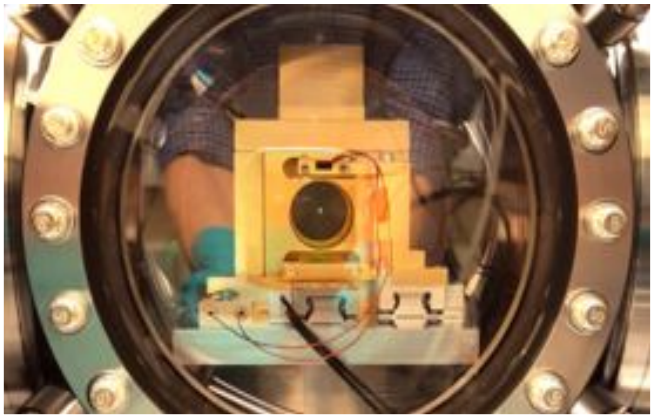
Yale Astronomy & Physics Graduate Programs



astronomy.yale.edu
physics.yale.edu

Yale *Physics*

Yale Physics Graduate Program Team

Prof. Karsten Heeger
Chair

Prof. Daisuke Nagai
Director of Graduate Studies

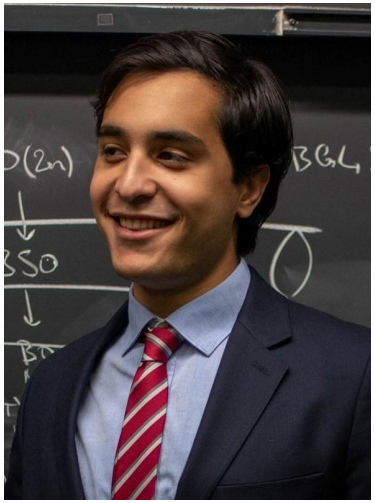
Prof. Helen Caines
Director of Graduate Admissions

Dr. Rona Ramos
Graduate Program Coordinator & Lecturer

Stacey Watts
Graduate Program Registrar

Yale *Physics*

Yale Physics Graduate Student Representatives



David Carcamo
Biological Physics
Graduate Student, Year 3

Yarone Tokayer
Astrophysics/Cosmology
Graduate Student, Year 3

Emily Pottebaum
Particle Experiment
Graduate Student, Year 2

Yale Physics

Yale Astronomy Faculty and Student Representatives

Prof. Malena Rice
Assistant Professor, Astronomy

Prof. Frank van den Bosch
Professor, Astronomy & Physics

Christopher Lindsay
Astronomy Graduate Student, Year 4

Juliette Hilhorst
Astronomy Graduate Student, Year 1

Statement of Principles

physics.yale.edu/statement-principles

Yale Physics

Yale Physics by the Numbers 2023

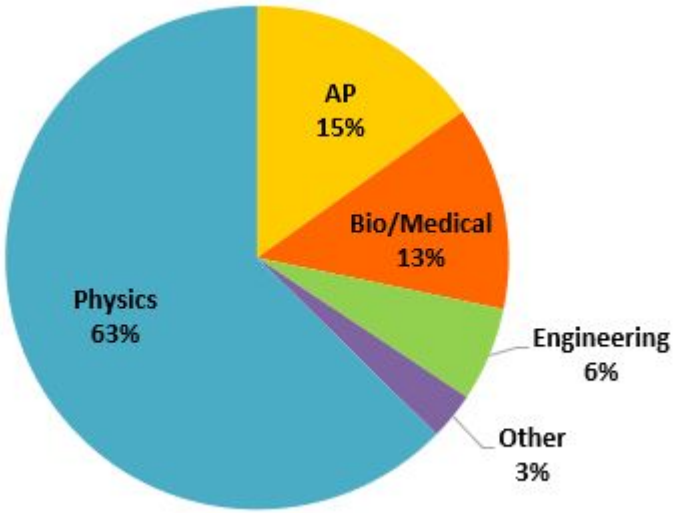
People

faculty (primary)	36
faculty (secondary)	32
research scientists	28
postdocs	30
grad students (physics)	156

median time to graduation 6.6 years

many opportunities to seek
Interdisciplinary research

Physics students have diverse interests working with advisors in Physics and related disciplines



Yale Physics

Research Areas

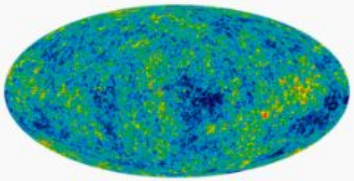
Traditional and emerging research areas

Research portfolio of department is evolving

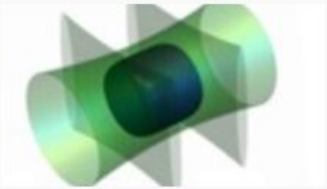
New faculty being hired

Current science initiatives on campus

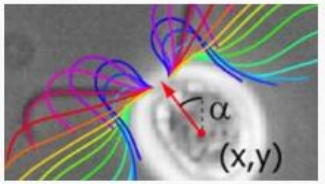
- data science
- quantum science
- instrumentation



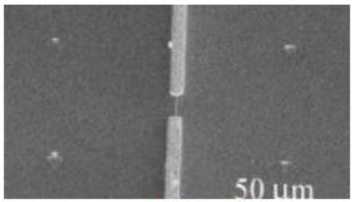
Astrophysics and Cosmology



Atomic, Molecular, and Optical Physics

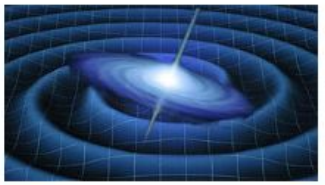


Biophysics

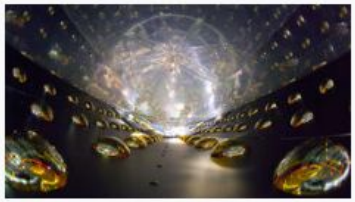


Condensed Matter Physics Experimental

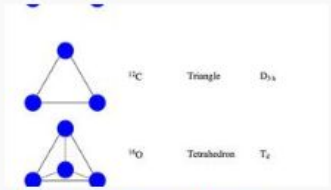
Condensed Matter Physics Theory



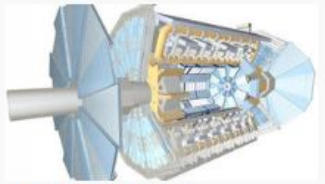
Gravitational Physics



Nuclear Physics Experimental

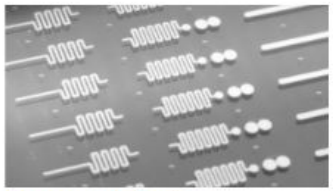


Nuclear Physics Theory



Particle Physics Experimental

Particle Physics Theory



Quantum Physics

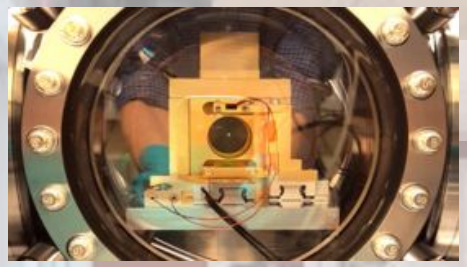
https://physics.yale.edu/research

Yale Physics

Yale Physics Research in Campus Centers

Wright Laboratory

Yale Quantum Institute



YCAA (Yale Center for Astronomy & Astrophysics)

Yale Center for Research Computing

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

Quantitative Biology Institute [QBio]

Systems Biology Institute

Energy Science Institute

Yale Physics

Physics Ph.D students' learning objectives guide to the graduate program

1. Students will acquire a general foundational knowledge of physics at the graduate level and the necessary accompanying methodological aspects of mathematics, computing, and instrumentation.

2. Students will learn to identify and solve problems at the frontier of physics knowledge, uphold standards of scientific integrity, and disseminate their research.

3. Students will become educators and communicators with the ability to promote an understanding and appreciation of physics across the university and in society.

4. Department members and students will work together to develop and realize, in the department and in the community, progress and success in diversity, equity, and inclusion in all aspects of the scientific enterprise.

Yale *Physics*

Graduate Program

- **Coursework**
  - Must take, waive or pass-out of 6 core courses, take at least one advanced elective and a Special Investigation (research) course
- **Teaching**
  - 10hrs/week of teaching for first 2 years
  - Learn to teach, deepen your knowledge of Physics
- **Qualifying Event**
  - Four 4-question "Event" → Not an exam! Taken at the beginning of the 2nd year. Part of the learning milestone's of the department. All students pass by participation!
- **Research**
  - typically, start in first year, full-time in summer after year 1
  - by mutual arrangement, you can start summer before you start graduate school (early start)
- **Flexibility in program**
  - many ways to personalize your course of study and research
  - admission to Yale does not bind you to a specific program

https://physics.yale.edu/academics/graduate-studies

Yale Physics

Q&A

Yale *Physics*

Academic Life and Campus Resources

Graduate Student Leadership

- ★ Regular town halls with department leadership
- ★ Graduate Student Advisory Committee
- ★ Graduate Students on Departmental Committees

Physics Colloquia and Seminars

Department of Physics

Home | About | Research | Academics | People | Media | Events | For Prospectives

HOME » EVENTS

- Physics Seminar Calendar
- External Seminars of Interest
- Physics Club & Prize Lectures Flyer
- Physics Club
- Prize Lectures
- Kimball Smith Series

Upcoming | Month | Week | Day | Year | All E

Upcoming Events

OCTOBER 12, 2022

11:00am	YCRC Research Support Office Hours
4:30pm	Nobel Prize in Physics 2022 Lecture: A. Douglas Stone, Yale University, "Spooky Action at a Distance wins the Nobel Prize"

OCTOBER 13, 2022

Yale Poorvu Center for Teaching and Learning

FACULTY | POSTDOCS | GRADUATE STUDENTS | UNDERGRADUATES | INITIATIVES

Home > Graduate Students

Graduate Students

About the Graduate Writing Laboratory

The Graduate Writing Lab

Writing and Public Speaking Consultations

Writing Workshops and Panels

Each semester, the Graduate

Peer-Review Groups

Learn about Peer-Review groups and how they can amplify your

GWL Writing Retreats and All Writes

Join your fellow graduate and professional school students for

Writing Resources for Graduate Students

Resources to guide you through all forms of academic writing in your

About Teaching Development for Graduate and Professional School Students

Teaching Consultations and Classroom Observations

Teaching Workshops

Teaching Programs and Grants

Teaching Forums

Resources for Graduate Student Teachers

McDougal Graduate Student Center

student support resources and community

Student Groups

Climate and Diversity Committee

Local 33 UNITE HERE!

Women in Physics +

WISAY

QuARK
(Queer Affiliated fRiends of physiKs)

GSAC
Graduate Student Advisory Committee

Andy Ding (Year 5) | Charles Lomba (Year 4) | Katie Chang (Year 3) | Braedyn Au (Year 3) | Andrew Neely (Year 2)

GSA
graduate student assembly
gsa.yale.edu

History and Foundations of Physics Reading Group (HoFoP)

Women in Physics (+Allies)

Diversity, Equity, and Inclusion


Research & Discovery


Community & Belonging


News & Honors


Education


Outreach

Get Involved


Shared Leadership


Advocacy


Legacy

Yale Physics Graduate Diversity Fellowship

Climate and Diversity Committee

APS Inclusion, Diversity, and Equity Alliance (APS IDEA)

Office for Graduate Student Development & Diversity (OGSDD)

physics.yale.edu/diversity-equity-and-inclusion

Yale Physics

The Physics PhD Application Components

- Personal Details
- Program of Study
- Statement of Academic Purpose (Research interests)
- 3 Letters of Recommendations
- Academic History
- Program-Specific Questions (subfields/faculty of interest)
- Additional Questions (All optional, Personal Narrative Recommended)
- Languages
- Test Scores (*GRE scores are Optional. TOEFL/IELTS scores are required for non-english speakers.)
  https://gsas.yale.edu/faq/admissions/standardized-test-questions
- Resume/CV

https://gsas.yale.edu/admissions/degree-program-application-process

Yale Physics

Frequently Asked Questions

Testing -

GREs - Optional

TOEFL/IELTS - Not required from an institution where English is the primary language of instruction. No minimum if not, 25+ on TOEFL speaking test, or 7.5+ on IELTS to teach

Application Costs and Deadlines -

Application Fee - $105 USD, Fee waiver request forms must be submitted before submitting applications

Application Deadline - December 15th

Graduate Student Support -

Tuition and Health Fees - $0 cost to student

Graduate Stipend - $40,530 USD, increases yearly

Early Program Opportunities -

Early Start Research - Paid research in a Research Group, June 1 - Aug 15

Physics Bootcamp - Basic refresher class in several foundational physics topics

physics.yale.edu/prospectivegrad/FAQ

Yale Physics

Come and meet us!

~~Oct. 26-28 - SACNAS Conference~~

~~Nov. 7 - Joint Webinar with Astronomy~~

Nov. 8 - Joint Webinar with Applied Physics

Nov. 9-10 - NSBP Conference

Dec. 15 - Applications Due

Early Feb. - Offer letters sent

April 15 - Deadline to Accept

Physics Open House

April 4-6, 2024

Yale Physics

Q&A

Yale *Physics*