



SONO - EIT Consortium, ESA, NASA

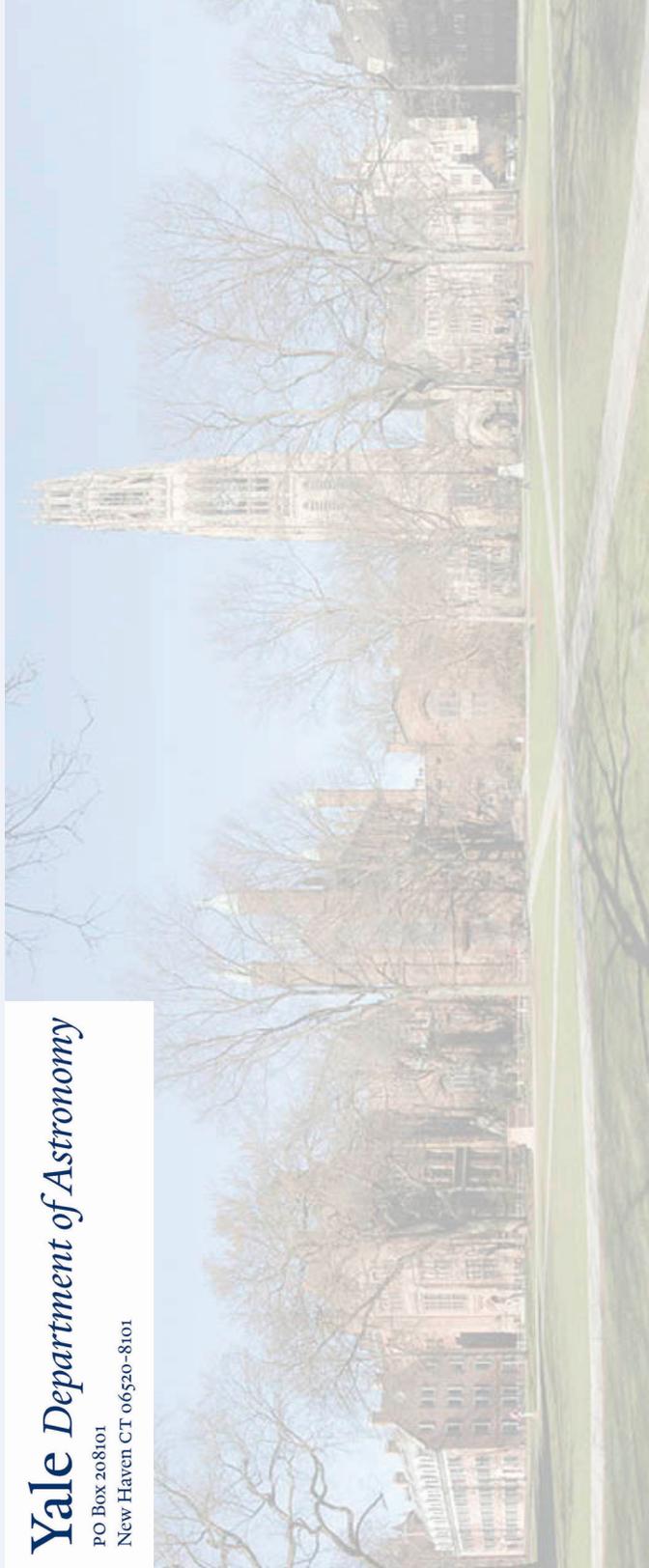
What are you doing next summer?

Imagine spending your summer:

- getting a head start on college and a career in science or tech
- working on an astrophysics research project at an observatory
- learning the fundamentals of computer programming and data science
- making new friends who are as interested in science as you are
- pushing yourself to accomplish more than you ever thought you could

The **Yale Summer Program in Astrophysics** is a 4-week residential enrichment program for rising high school seniors who are interested in science, math, and other tech fields.

Students take classes in science and programming, complete a research project using telescopes at Yale, and present their results at the end of the program. The program also includes other enrichment activities such as field trips and guest lectures.



Yale Department of Astronomy

PO Box 208101
New Haven CT 06520-8101

YSPA

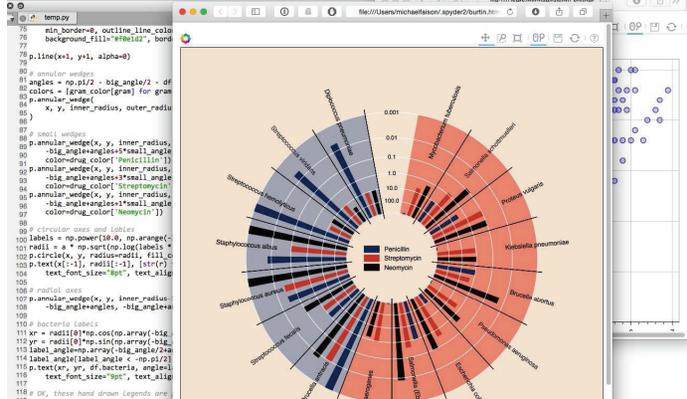
The Yale Summer Program in Astrophysics

July 10 - August 7, 2016



... an astrophysics research program for rising seniors;
 ... a programming and data science camp;
 ... an experience like no other.

yspa.yale.edu



Astrophysics Research

Students at YSPA attend intensive classes on topics in physics, astronomy, math, and programming. These classes are designed to facilitate student-driven research projects, which could include: studying the spectra of supernovas in other galaxies, the masses of exoplanets, or the orbits of near-earth asteroids.

Students work in teams to get data for their research projects with the on-campus 16-inch telescope, as well as remote telescopes in places such as Chile, New Mexico and Australia.

At the end of the program, all research teams write up their results as a scientific paper and give a presentation. Research done at YSPA could be expanded into an Intel Science Talent Search or a senior Capstone Project.

Programming & Data Science

The research project at YSPA focuses on building a scientific model to solve a problem in astrophysics. Students learn the fundamentals of data analysis and programming using the Python language—skills which are essential in all fields of research, including the growing field of data science for the tech industry.



Each student has his or her own workstation at the observatory for working on their project with their teammates and receives extensive one-on-one instruction from our faculty.



YSPA is administered by the Department of Astronomy at Yale University and hosted by the Leitner Family Observatory and Planetarium

Fun at Yale and Beyond

YSPA isn't just about research and coding! We will do other fun projects like launching a balloon to the edge of space or gazing at Saturn through telescopes.



We will take field trips to New York, the beach, hiking trails, Yale research labs and museums...

There will also be extra-curricular activities on campus such as swing dancing, a talent show, frisbee games, and making pizzas at the Yale Farm. At YSPA, you'll live on campus and explore all that Yale has to offer.

Apply online at yspa.yale.edu/apply before 8pm EST on March 6, 2016.

- » International students are welcome to apply, but applicants must be proficient in English.
- » Members of under-represented minority groups are especially encouraged to apply.
- » Need-based financial aid is available for those who are accepted to the program.

For more information, please see yspa.yale.edu or E-mail yspa@leitnerobservatory.org.

