Graduate Study in Astronomy

The Department of Physics and Astronomy

at Georgia State University offers programs of study leading to the Doctor of Philosophy (Ph.D.) in astronomy and the Master of Science (M.S.) in physics with a concentration in astronomy.

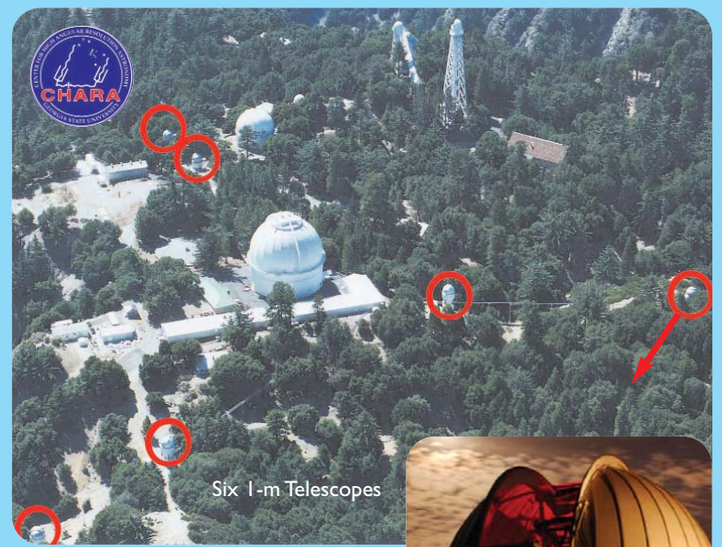
The department's program of excellence is promoted by an emphasis on meaningful research from the student's first semester in residence and a curriculum providing a solid foundation in physics and astronomy.

The Astronomy Program within the department has 10 Ph.D. faculty, 9 postdoctoral associates or Ph.D. staff, and 27 graduate students. Graduate students benefit from observing programs at dedicated Georgia State observatories, national ground-based facilities, and space observatories. Students in the program enjoy close working relationships with faculty actively engaged in research.

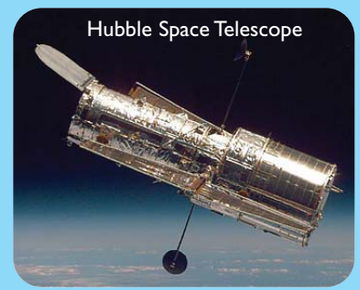
Astronomy/Astrophysics Graduate Courses

Astr 6000 Fundamentals of Astrophysics
Astr 6100 Astronomical Techniques and Instrumentation
Astr 6300 Teaching Astronomy
Astr 8000 Stellar Atmospheres
Astr 8100 Stellar Structure and Evolution
Astr 8200 Galactic Astronomy
Astr 8300 The Interstellar Medium
Astr 8400 Extragalactic Astronomy
Astr 8500 Binary Stars
Astr 8600 Stellar Spectroscopy
Astr 8700 Relativistic Astrophysics and Cosmology
Astr 8800 Optics in Astronomy
Astr 8850 Planetary Science
Astr 8900 Seminar in Astronomy
Astr 8910 Directed Study in Astronomy
Phys 8120 Plasma Physics

World-Class Research, Education, and Facilities

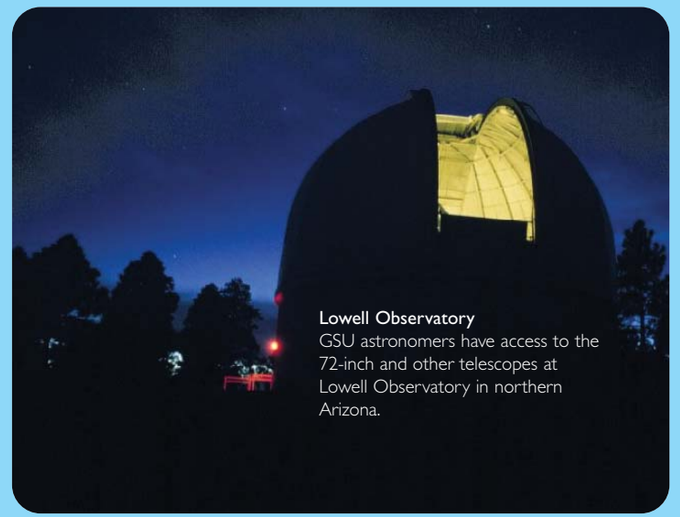


Georgia State's **Center for High Angular Resolution Astronomy (CHARA)** operates an optical/infrared interferometric array of six 1-m telescopes at Mt. Wilson Observatory, California (managed from Georgia State). The CHARA Array is one of the world's most powerful optical stellar interferometers and the only optical array operated by a U.S. university. The telescopes are controlled from a remote operations center located on campus.



The **Program for Extragalactic Astronomy (PEGA)** and CHARA astronomers have observing programs on the NASA Hubble Space Telescope, Chandra X-ray Observatory, and Spitzer Space Telescope, as well as planned programs for the Space Interferometry Mission. With a focus on examining the astrophysics of active galactic nuclei, PEGA efforts include ground-based photometry and space-based high-energy observations, spectroscopy, and theoretical studies.

As a member of the **Small and Moderate Aperture Research Telescope System (SMARTS) Consortium**, the department has long-term access to four telescopes in the Chilean Andes with apertures of 0.9-m to 1.5-m.



Lowell Observatory
GSU astronomers have access to the 72-inch and other telescopes at Lowell Observatory in northern Arizona.

Additional Facilities

Hard Labor Creek Observatory
The department operates the Georgia State Hard Labor Creek Observatory, which includes two 16-inch telescopes and a one-meter equivalent aperture Multiple-Telescope Telescope (MTT) with a medium-resolution fiber-optic spectrograph.

Georgia State is a leading research institution located in Atlanta, Georgia. The university, which has an enrollment of approximately 25,000 undergraduate and graduate students, offers over 120 graduate degree programs. The student population of the university, recently named one of the 20 most diverse in the U.S., reflects Atlanta's global character. The department of Physics and Astoronomy is part of the College of Arts and Sciences, which consists of 20 departments, schools, and institutes, as well as 19 interdisciplinary research and service centers.

Georgia State website: **WWW.GSU.EDU**
College website: **WWW.CAS.GSU.EDU**

Additional Information

All full-time students accepted into our program receive financial assistance. Students on full assistantships receive a yearly stipend, as well as a waiver of tuition. The Ph.D. program includes a minimum of two years of full-time residency.

Prospective students may obtain application materials from the department's website:

WWW.PHY-ASTR.GSU.EDU

For technical questions or to request a graduate application, please contact Dr. D. R. Gies, astronomy graduate director, at gies@chara.gsu.edu.

Additional information on the astronomy graduate program can be found online at:

WWW.CHARA.GSU.EDU

Astronomy Faculty

William G. Bagnuolo, Jr., Ph.D., California Institute of Technology
optical interferometry, innovative telescopes, hot stars

D. Michael Crenshaw, Ph.D., The Ohio State University
spectroscopy of mass outflows in AGN

Douglas R. Gies, Ph.D., University of Toronto
Hot stars, microquasars, graduate program director

Todd J. Henry, Ph.D., University of Arizona
parallax measurements, census and properties of nearby stars

Harold A. McAlister, Ph.D., University of Virginia
optical interferometry, stellar properties and binaries, CHARA director

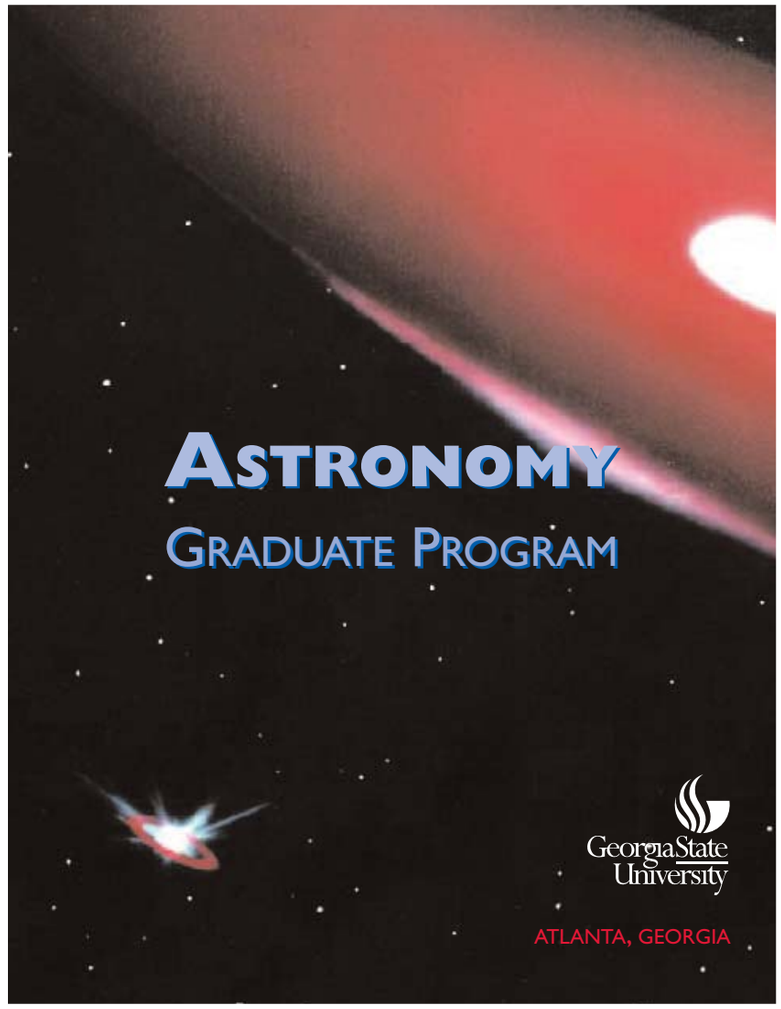
H. Richard Miller, Ph.D., University of Florida
optical and X-ray variability of AGN, department chair

Cherilynn A. Morrow, Ph.D., University of Colorado
helioseismology, astronomy and physics education research, public outreach

Russel J. White, Ph.D., University of California – Los Angeles
young stars and planets, star formation

Paul J. Wiita, Ph.D., Princeton University
accretion disks and radio jets, AGN theoretical models

David W. Wingert, Ph.D., Princeton University
interstellar medium, stellar evolution, undergrad. advisor



Astronomy
Graduate Program

ATLANTA, GEORGIA