AURA

Association of Universities for Research in Astronomy

aura-astronomy.org

Our Mission

"AURA provides innovative, open resources to enable discovery and excellence in research, to unify the astrophysics communities, and to promote public understanding of our universe and the benefits of scientific exploration."

AURA

The Association of Universities for Research in Astronomy (AURA) began as a small consortium in 1957 with just eight founding members. AURA today is a thriving scientific institution with 51 members (49 US institutions and 2 international affiliates) and over 1,800 employees in Baltimore, Tucson, Hawai'i and Chile.

AURA's role is to establish, nurture, and promote public observatories and facilities that advance innovative astronomical research. In addition, AURA is deeply committed to public and educational outreach, and to diversity throughout the astronomical and scientific workforce.

AURA has been recognized by the Internal Revenue Service as tax-exempt under Section 501(c)(3) of the Internal Revenue Code. Contributions to AURA are tax deductible to the extent provided by law. AURA's Employer Identification Number is 86-0138043.

To learn more about current job opportunities visit our job board at https://www.aura-astronomy.org/careers/

aura-astronomy.org

Space Telescope Science Institute

Expanding the Frontiers of Space Astronomy

stsci.edu

Space Telescope Science Institute (STScI) operated by AURA for NASA, is a multi-mission operations center for NASA's flagship observatories and a world-class astronomical research center. STScI is responsible for the science program for the **Hubble Space Telescope** and for science and flight operations for NASA's astrophysics flagship, the **James Webb Space Telescope**, launched in 2021.

STScI has developed and executed the science program for the Hubble Space Telescope since its launch in 1990. Hubble continues to revolutionize astronomy and expand our knowledge of the Universe. More than 15,000 astronomers worldwide have used Hubble and published Hubble results.

Webb's extraordinary capabilities are advancing all areas of astrophysics, providing observations of the most distant galaxies in the Universe and enabling detailed studies of exoplanets. STScI is also developing science operations for NASA's next space telescope the **Nancy Grace Roman Space Telescope**, which has a field of view 100 times greater than Hubble with similar sensitivity and resolution. Looking forward, STScI is now partnering with NASA and the scientific community to plan the **Habitable Worlds Observatory**, a future large telescope to search for life on other worlds and transform our astrophysical understanding of cosmic origins.

The **Barbara A. Mikulski Archive for Space Telescopes** (MAST) houses a vast collection of optical, UV, and infrared data, spanning over 50 years, which have contributed to some of the most profound discoveries about our Universe. MAST provides users with convenient search-and-retrieval tools to access more than 4,500 terabytes of data from telescopes like Hubble, Webb, TESS, and soon, Roman. Recently, MAST has been enhancing its services by leveraging Amazon Web Services to develop tools that allow astronomers to analyze these extensive datasets directly, eliminating the need to transfer large files to their own computers.

SOLAR

NSF National Solar Observatory

Unlocking the Mysteries of the Sun

nso.edu

The U.S. National Science Foundation (NSF) **National Solar Observatory** (NSO) is the national center for ground-based solar physics in the United States. The mission of the NSO is to advance knowledge of the Sun, both as an astronomical object and as the dominant external influence on Earth, by providing forefront observational opportunities to the research community. The mission includes the operation of cutting edge facilities, the continued development of advanced instrumentation both in-house and through partnerships, conducting solar research, and educational and public outreach.

NSO leads the operation of the **NSF Daniel K. Inouye Solar Telescope**, a four-meter solar telescope on the island of Maui, Hawai'i. The largest solar telescope in the world, it focuses on understanding the Sun's dynamic behavior by observing solar magnetic fields. A combination of cutting edge technology and innovative design will produce the first ongoing measurements of the magnetic fields in the Sun's corona. The Inouye Telescope's 4-meter mirror enables views of the solar atmosphere like we've never seen before.

The **NSO Integrated Synoptic Program** (NISP) operates a six-station global network (the "GONG network") that has observed the Sun for more than 20 years. The world-wide distribution of telescopes means at least one is trained on the Sun at all times providing continuous imaging of the Sun and its solar magnetic field. This network of extremely sensitive solar imagers is a crucial asset for space weather operational forecasting.

The goal of **NSO's Community Science Program** (NCSP) is to develop analysis and modeling tools that will enhance the value of data taken with NSO's observing facilities – the Inouye Solar Telescope and NISP. An integral part of this initiative is to train the next generation of Solar Physicists in the use and development of these tools.

NSO is operated by AURA under a cooperative agreement with the NSF.

Daniel K. Inouye Solar Telescope

NSF NOIRLab

Discovering our Universe Together

noirlab.edu

The U.S. National Science Foundation (NSF) **NOIRLab** is the U.S. national center for ground-based, nighttime optical astronomy. The mission of NOIRLab is to enable breakthrough discoveries in astrophysics by developing and operating state-of-the-art ground-based observatories and providing data products and services for a diverse and inclusive community.

Through its five Programs — **NSF Cerro Tololo Inter-American Observatory** (CTIO), **the Community Science and Data Center** (CSDC), **International Gemini Observatory, NSF Kitt Peak National Observatory** (KPNO) and **NSF-DOE Vera C. Rubin Observatory** — NSF NOIRLab serves as a focal point for community development of innovative scientific programs, the exchange of ideas, and creative development. NOIRLab's infrastructure enables the astronomy community to advance humanity's understanding of the Universe by exploring significant areas of astrophysics, including dark energy and dark matter, galaxies and quasars, the Milky Way, exoplanets, and small bodies in our own Solar System.

In collaboration with the astronomical community, partner organizations, other US astronomy organizations, and NSF, NOIRLab develops and advances a strategic vision for NSF-funded future optical and infrared facilities.

The astronomical community is honored to have the opportunity to conduct astronomical research on Iolkam Du'ag (Kitt Peak) in Arizona, on Maunakea in Hawai'i, and on Cerro Tololo and Cerro Pachón in Chile. NSF NOIRLab recognizes and acknowledges the very significant cultural role and reverence that these sites have to the Tohono O'odham Nation, to the Native Hawai'ian community, and to the indigenous peoples of Chile, respectively.

AURA operates these facilities and NSF NOIRLab under a cooperative agreement with the NSF.

Cerro Tololo Observatory

Gemini Observatory

Vera C. Rubin Observatory

Kitt Peak Observatory

GROUND

MEMBERS

INSTITUTION	MEMBER SINCE
Boston University	1993
California Institute of Technology	1972
Carnegie Institution for Science	1997
Carnegie Mellon University	2017
Cornell University	2016
Fisk University	2010
Georgia State University	2008
Harvard University*	1957
Indiana University*	1957
Iowa State University	1992
Johns Hopkins University	1982
Keck Northeast Astronomy Consortium	2018
Massachusetts Institute of Technology	1981
Michigan State University	1997
Montana State University	2005
New Jersey Institute of Technology	2010
New Mexico Institute of Mining and Technology	2018
New Mexico State University	1999
Ohio State University*	1957
Pennsylvania State University	1990
Pontificia Universidad Catolica de Chile**	1997
Princeton University	1959
Rutgers University	1999
Smithsonian Astrophysical Observatory	2017
Stanford University	2012

INSTITUTION	MEMBER SINCE
Stony Brook University	1986
Texas A&M University	2014
Universidad de Chile**	1992
University of Arizona	1972
University of California at Berkeley	2007
University of California at Los Angeles	2023
University of California at Santa Cruz*	1957
University of Chicago*	1957
University of Colorado	1977
University of Florida	2002
University of Hawaii	1978
University of Illinois at Urbana-Champaign	1980
University of Maryland	1986
University of Michigan*	1957
University of Minnesota	1995
University of North Carolina at Chapel Hill	1995
University of Pittsburgh	2012
University of Texas at Austin	1972
University of Texas at San Antonio	2019
University of Toledo	2016
University of Utah	2023
University of Virginia	2003
University of Washington	1986
University of Wisconsin*	1957
Vanderbilt University	2010
Yale University	1958

*Original members **International Affiliate members

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