



Steward Observatory Newsletter

April News

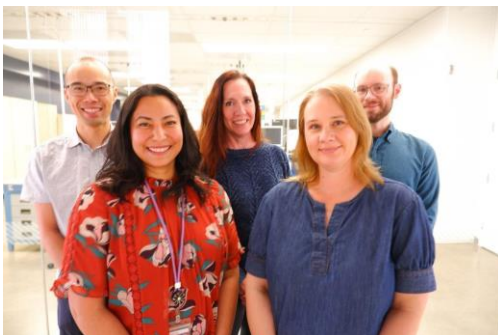
2025 NHFP Fellows



NASA Hubble Fellowship Program

Two Steward Observatory alumni receive highly competitive Einstein Fellowships

The highly competitive NASA Hubble Fellowship Program (NHFP) recently named 24 new fellows to its 2025 class, including two former Steward Observatory students: [Juan Nico Garavito Camargo](#), who earned his Ph.D. in 2021 with Dr. Gurtina Besla as his thesis advisor; and [Massimo Pascale](#), who earned his B.S. from the Department of Astronomy in 2019. [Learn more](#)



U of A Imaging Technology Laboratory unveils a new vision in infrared innovation

Ongoing research within the University of Arizona [Imaging Technology Laboratory \(ITL\)](#) has led to the development of some of the most advanced astronomical image sensors available anywhere in the world. From space-based to ground-based observing, these sensors have enabled countless discoveries. And, under new leadership, the lab is further expanding its range of capabilities. [Learn more](#)



Dr. Brittany Miles joins faculty at Steward Observatory, advancing UofA's legacy in infrared instrumentation innovation

Dr. Miles studies the atmospheres of exoplanets and isolated, rogue worlds, known as brown dwarfs. She uses JWST and large ground-based telescopes to understand the composition and weather behavior of these objects. [Learn more](#)



Fading Light, Fierce Winds: JWST's Observations of a Low-Luminosity Quasar Unlocks Insight into the Evolution of Supermassive Black Holes at Cosmic Dawn

Quasars—very high-energy sources powered by matter falling into supermassive black holes—are easiest to find when they are at their brightest, i.e. most luminous. [Learn more](#)



NASA's SPHEREx mission will use software from the Arizona Cosmology Lab to answer questions about the first moments after the Big Bang

The mission has three goals. Within the Milky Way, it will search for signs of water ice – a major ingredient in the search for life beyond Earth. It will probe the origin and history of galaxies using a fairly new technique called intensity mapping. And it will explore the deep early history of the universe itself. [Learn more](#)

[Arizona Daily Star: How UA of research is helping to find the origins of the Milky Way, universe.](#)



How next-gen telescopes could discover extraterrestrial oxygen

The search for extraterrestrial life has entered a new phase, with University of Arizona researchers evaluating the potential of next-generation telescopes to detect biosignatures on distant worlds. [Biosignatures](#) are detectable signs of past or present life, such as specific molecules, isotopes, or structures. [Learn more](#)

In the Spotlight



Graduating Student Ella Butler

As Ella Butler prepares to graduate with her Bachelor's of Science in Astronomy and Physics, she reflects on highlights from her time at Steward Observatory, including sharing her love of astronomy as a tour guide at the Richard F. Caris Mirror Lab and as a planetarium operator at Flandreau Science Center. As she looks ahead to someday being a professor herself, she says "the great educators in the past have all paved the way for me to be here. [Learn more](#)



Graduating Student Nikhil Garuda

As Nikhil Garuda prepares to graduate with his Bachelor's of Science in Astronomy, he reflects on highlights from his time at Steward Observatory, including collaborating on research ranging from astronomy education to discovering the first-ever triply imaged Type 1a supernova. Nikhil believes "the astronomical community thrives when knowledge flows freely between generations of researchers." [Learn more](#)

Friends of Steward Observatory



Image credit: SH2 106 also known as the **Celestial Snow Angel**, is an emission nebula and a star formation region in the constellation Cygnus. By Adam Block, Mt. Lemmon SkyCenter

[Your donation](#) provides astronomy students the chance to grow their skills, experience discovery and build the confidence necessary to take on the challenging problems of the future. These opportunities are priceless, but providing them requires funding.

Our students are extremely grateful for your investment in Astronomy.

To a student, every dollar is important. Your donation goes directly to help support our innovative students in the form of scholarships and summer research project needs. Students are working on cutting-edge research to enhance our knowledge and understanding of the universe.

These students are the next-generation of scientists who will be making the great discoveries in the future. Student success builds our world-class astronomy program that continues to stand out from our peers and expands Arizona's research horizons.

Your donation is tax deductible!

Supporting the next-generation of science and discovery is the best reward.

[Learn more](#)



THE UNIVERSITY OF ARIZONA
COLLEGE OF SCIENCE

Astronomy & Steward Observatory



[Have a Friend Sign up For Our Monthly Astronomy Newsletter](#)

For more information or questions contact:

Cathi Duncan | 520-621-1320 | cduncanf@arizona.edu

