



THE UNIVERSITY OF ARIZONA
COLLEGE OF SCIENCE

Astronomy & Steward Observatory

August Newsletter

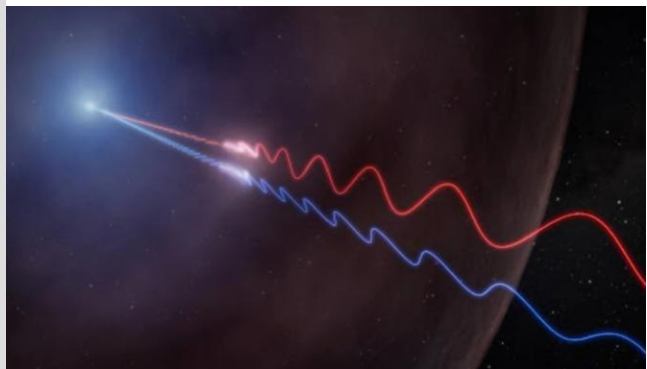


New research reveals the hidden fate of the universe's mysterious little red dots

The new research published in [*The Astrophysical Journal*](#), and led by **Pierluigi Rinaldi** of the **University of Arizona's Steward Observatory**, now at the **Space Telescope Science Institute**, examines a rare lower-redshift example that may reveal what these objects become over time.

[Daily Galaxy Article](#)

Scientists have proposed one pathway little red dots can follow as the universe matures based on their analysis of spiral galaxy WISEA J123635.56+621424.2, nicknamed the "Saguaro. Image: NASA, ESA, CSA, STScI, Pierluigi Rinaldi (Steward Observatory); Image Processing: Alyssa Pagan (STScI)



This illustration depicts Faraday rotation in the afterglow of a gamma-ray burst. A powerful jet (upper left) sends polarized radio waves through an H II region, a bubble of magnetized gas. NSF/AUI/NSF NRAO/M.Weiss

How stars die: Astronomers detect magnetic fingerprint of a cosmic explosion for the first time

"We're effectively using the universe as our laboratory to test our understanding of how physics operates under such extreme conditions," said Kate Alexander, assistant professor of astronomy at the University of Arizona's Steward Observatory and co-author of the study.

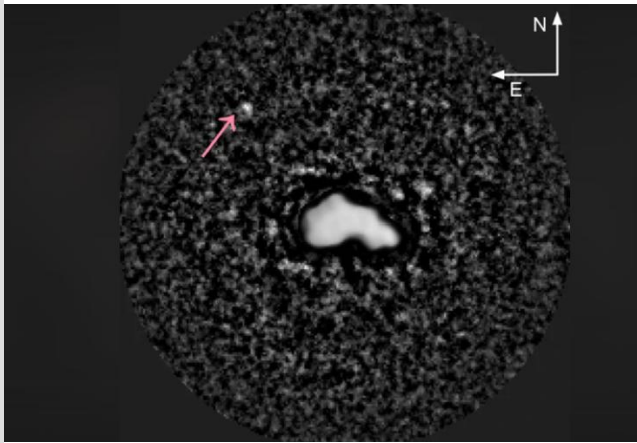
[Learn more](#)



Korea Astronomy and Space Science Institute Increases Investment in Giant Magellan Telescope

PASADENA, CA – July 7, 2026 – The Korea Astronomy and Space Science Institute (KASI) has reaffirmed its long-term commitment to the Giant Magellan Telescope through a new investment that brings its total contribution to nearly \$110 million (USD), strengthening the Republic of Korea's leadership as the project's third-largest partner.

[Learn more](#)



Adaptive-optics observations obtained with the Large Binocular Telescope's SHARK-VIS instrument reveal the unusual shape of asteroid (44) Nysa. Courtesy: Kate Minker and the University of Arizona

KVOA: Mount Graham scope helps crack mystery of 3-lobed asteroid

TUCSON, Ariz. (KVOA) - Scientists have discovered that one of the brightest asteroids in our solar system has an unusual three-part structure and its own small moon.

An international research team used powerful telescopes to capture the clearest images ever taken of asteroid (44) Nysa, which orbits the sun in the main belt between Mars and Jupiter. The observations revealed the asteroid appears to have three distinct sections connected by narrow valleys that wrap around its surface, according to the [University of Arizona](#).

[Learn more](#)

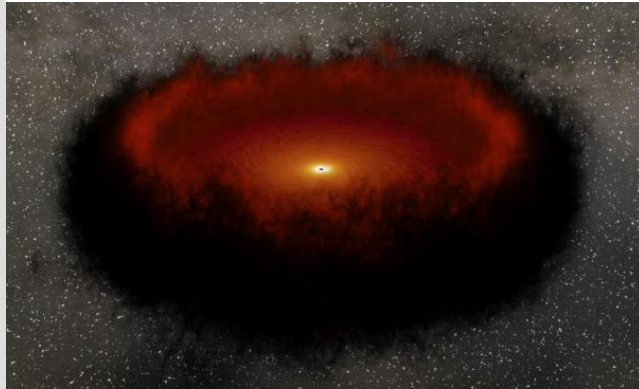


Quasars – shown here in an artist's impression – are among the brightest, most energetic objects in the universe, powered by supermassive black holes.

The two most distant quasars ever observed: U of A astronomers help shatter cosmic record

An international team of astronomers, including a team at the University of Arizona Steward Observatory, announced the discovery of 31 quasars from a time when the universe was just 600 to 800 million years old – a mere 5% of its current age. Quasars are among the brightest, most energetic objects in the universe, powered by supermassive black holes devouring matter at the center of galaxies.

[Learn more](#)



National Geographic: It's one of the biggest mysteries of the cosmos: What are these little red dots?

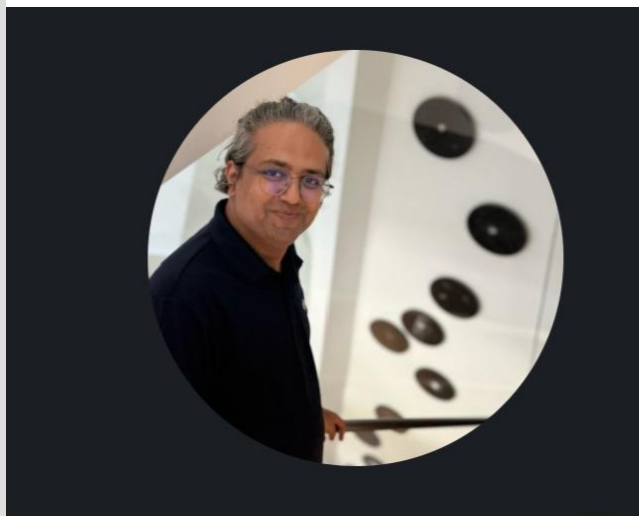
Massive galaxies? Dusty black holes? Black hole stars? Scientists have raised a lot of theories

around what the crimson blobs in James Webb data might be.

[Learn more](#)

When the James Webb space telescope began collecting data, researchers noticed strange red dots in the early universe. They share similarities with black holes, but astronomers are still struggling to understand what exactly they are. NASA/JPL-Caltech

Celebrating Outstanding Achievement



University of Arizona student selected as a recipient of the Heising-Simons Inaugural Astronomical Innovation Fellowship!

This prestigious fellowship recognizes promising early-career researchers and supports innovative work that advances our understanding of astronomy and the universe. Aafaque's selection highlights the outstanding talent and research taking place at the University of Arizona and the university's

Aafaque Khan, Ph.D., Department of
Astronomy

commitment to supporting the next
generation of astronomers.

[Learn more](#)

Astronomy Things to Do this Summer!



Steward Observatory on the University of
Arizona campus. 933 N. Cherry Ave

[Map and Directions](#) Parking: Cherry Avenue
(closest).

Program starts at 7:00 pm

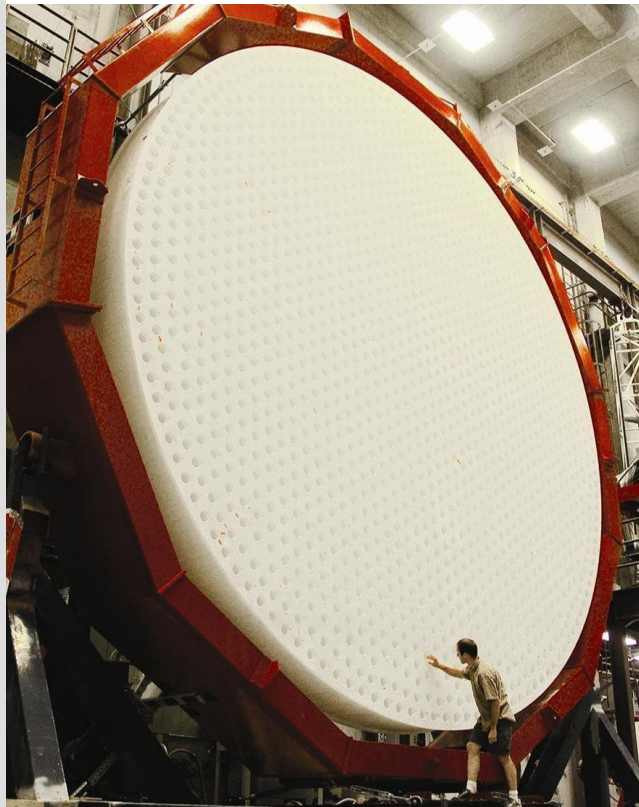
UA Campus Astronomy Series: Tucson's Window to the Universe

Looking for an engaging summertime activity?
Join us for an evening of exploration and
discovery at Steward Observatory on the
University of Arizona campus!

The evening begins with a fascinating look at
current astronomical research and the
exciting work University of Arizona scientists
are doing to explore the universe and uncover
its secrets. The experience continues under
the Tucson night sky, where participants will
observe celestial objects through the Ray E.
White 21-inch telescope, the same telescope
used by University of Arizona astronomy
students.

Whether you're curious about distant
galaxies, planets, stars, or the mysteries of the
cosmos, this unique experience offers a
chance to learn, explore, and see the universe
in a whole new way.

[Learn more](#)



Award-Winning Experience—Two Years Running! Tripadvisor's Top 10% of Things to Do Worldwide

See Where the Future of Astronomy Is Made!

Discover the Richard F. Caris Mirror Lab at the University of Arizona and go behind the scenes to see how some of the world's largest telescope mirrors are made.

During this 90-minute guided tour, explore the remarkable technology and craftsmanship behind these giant mirrors and learn how they will help astronomers uncover the mysteries of our universe.

See the technology. Discover the science. Experience the extraordinary.

[Learn more](#)



Mt. Lemmon SkyCenter at the summit of Mt. Lemmon.

DayTours: Uncover the Secrets of Our Mountaintop Observatory

Enjoy a captivating experience at the heart of our mountaintop observatory with our guided daytime tours! Discover the rich history of our unique site, from its origins as a Cold War early warning radar station to its current role as a leading astronomical research facility.

[Learn more](#)

Friends of Steward Observatory

Your generosity helps us explore the cosmos

while inspiring those who will lead the next generation of discovery!

Summer skies remind us that there is always more to discover. At Steward Observatory, curiosity drives us to ask new questions, explore the universe, and expand our understanding of our place within it.

From studying distant galaxies and planets beyond our solar system to developing technologies that reveal the cosmos in new ways, University of Arizona astronomers are pushing the boundaries of discovery every day.

Here's to a summer filled with curiosity, discovery, and wonder beneath the stars!

[Learn more](#)

[Make a Gift](#)

[Additional Astronomy Giving Options](#)

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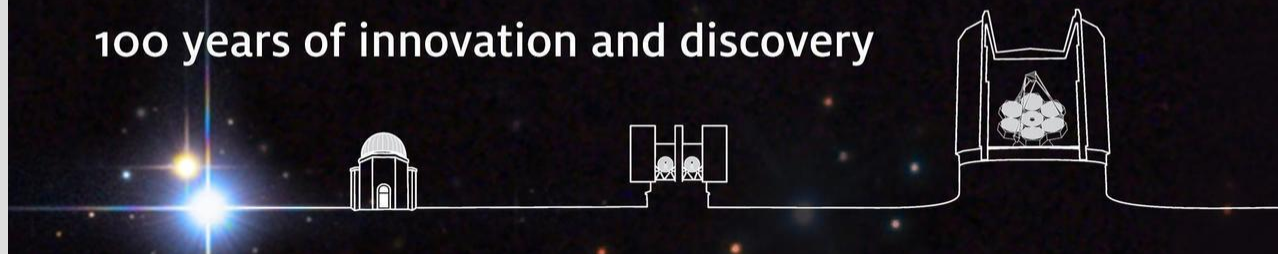
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For more information or questions

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Steward Observatory

100 years of innovation and discovery



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