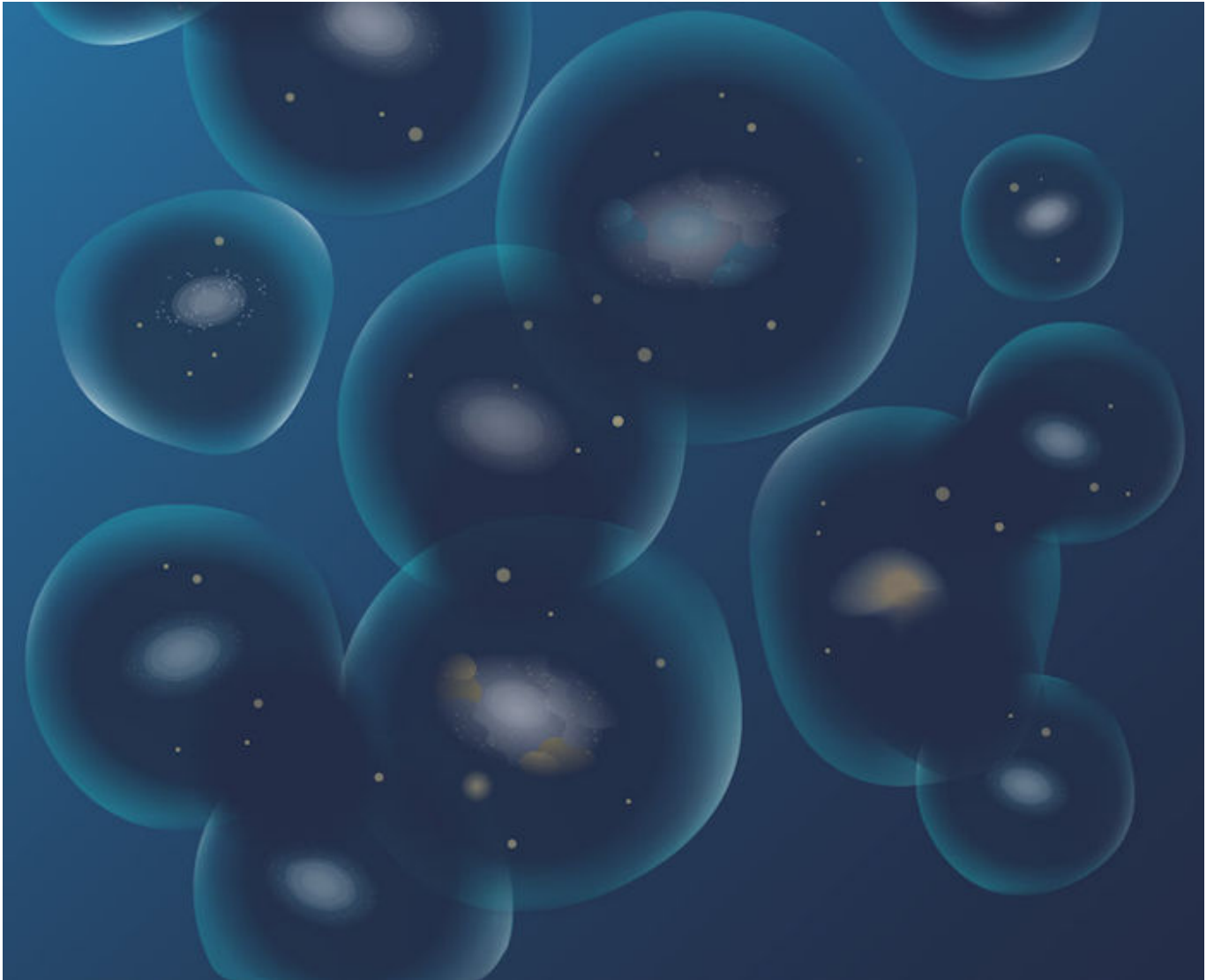


“How did the universe become transparent? New insight here”



The universe we see today looks clear and empty, apart from the stars and galaxies. In the [early universe](#), however, a few hundred million years after the [Big Bang](#), the cosmos was opaque. Light from the stars couldn't penetrate the dense hydrogen intergalactic gas. So, how did the universe become

clear? Using data from NASA's [Webb Space Telescope](#), an international group of astronomers [said](#) on June 12, 2023, that light from stars ionized and heated the surrounding gas.

[Click here to read the complete article.](#)

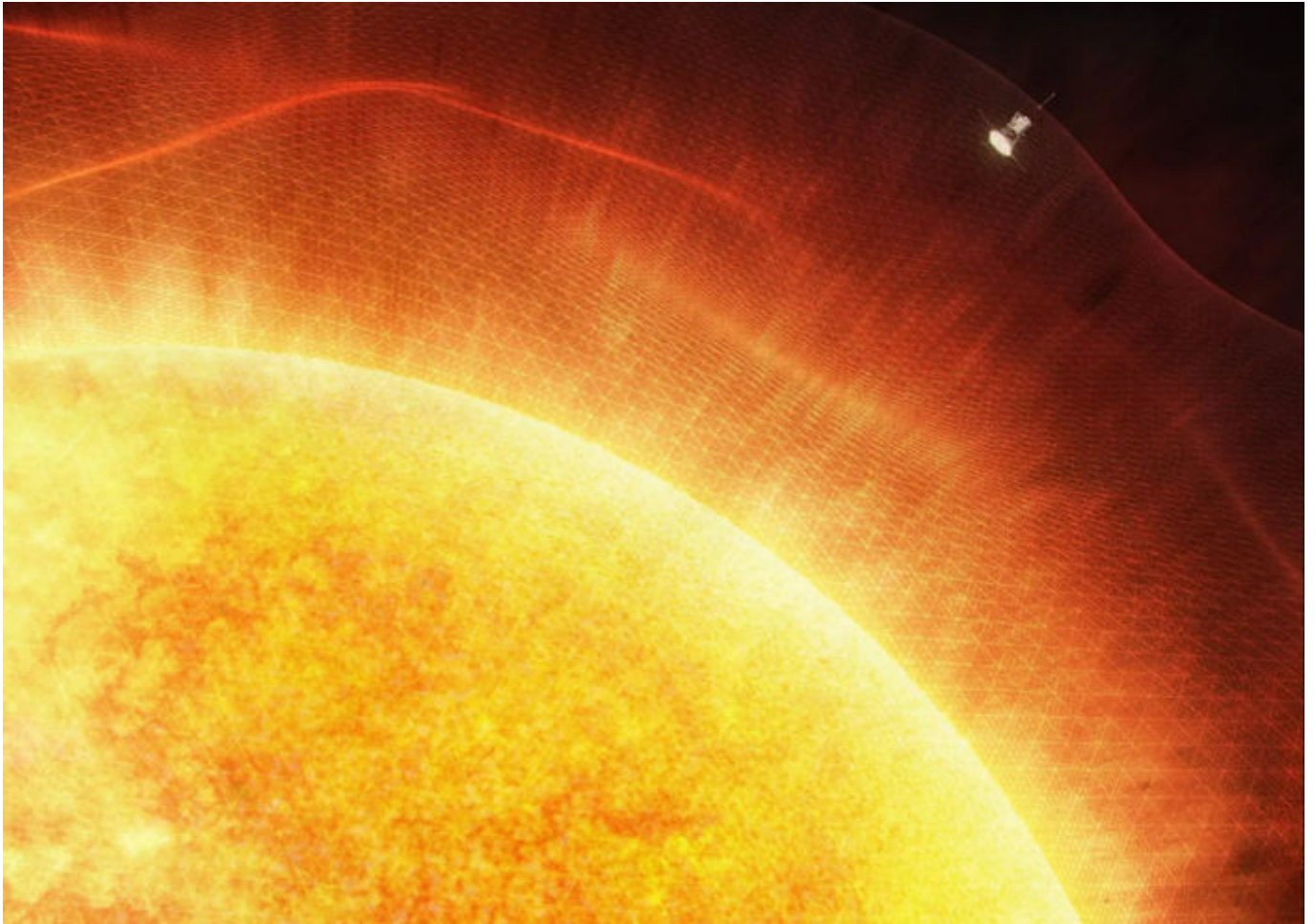
**“8 Mysterious Places
Scientists Still Can't
Explain”**



Whether naturally occurring or human-made, some phenomena on Earth are so perplexing that they leave even scientists scratching their hands. From strange lights that illuminate the night sky to creatures thriving under confounding circumstances and fields of giant, perfectly round stone spheres, take a mind-bending journey to eight places with mysterious phenomena.

[Click here to read the complete article.](#)

“First mission to ‘touch’ the sun catches the solar wind| CNN”



A solar mission that has been spiraling closer to the sun to unravel its secrets has flown near enough to our star's surface to make a key discovery.

Data from the Parker Solar Probe has uncovered the source of solar wind, a stream of energized particles that flow from the corona, or the sun's hot outer atmosphere, toward Earth.

One of the key motivations behind the mission, named for

the [late astrophysicist Eugene Parker](#) and [launched in 2018](#), was to determine what the wind looks like as it forms near the sun and how it escapes the star's gravity.

As the probe came within about 13 million miles (20.9 million kilometers) of the sun, its instruments detected fine structures of the solar wind where it generates near the photosphere, or the solar surface, and captured ephemeral details that disappear once the wind is blasted from the corona.

[See the entire article and video here.](#)

Link contributed by Gene Savoy.

“Glimpse 45,000 baby galaxies in the early universe”

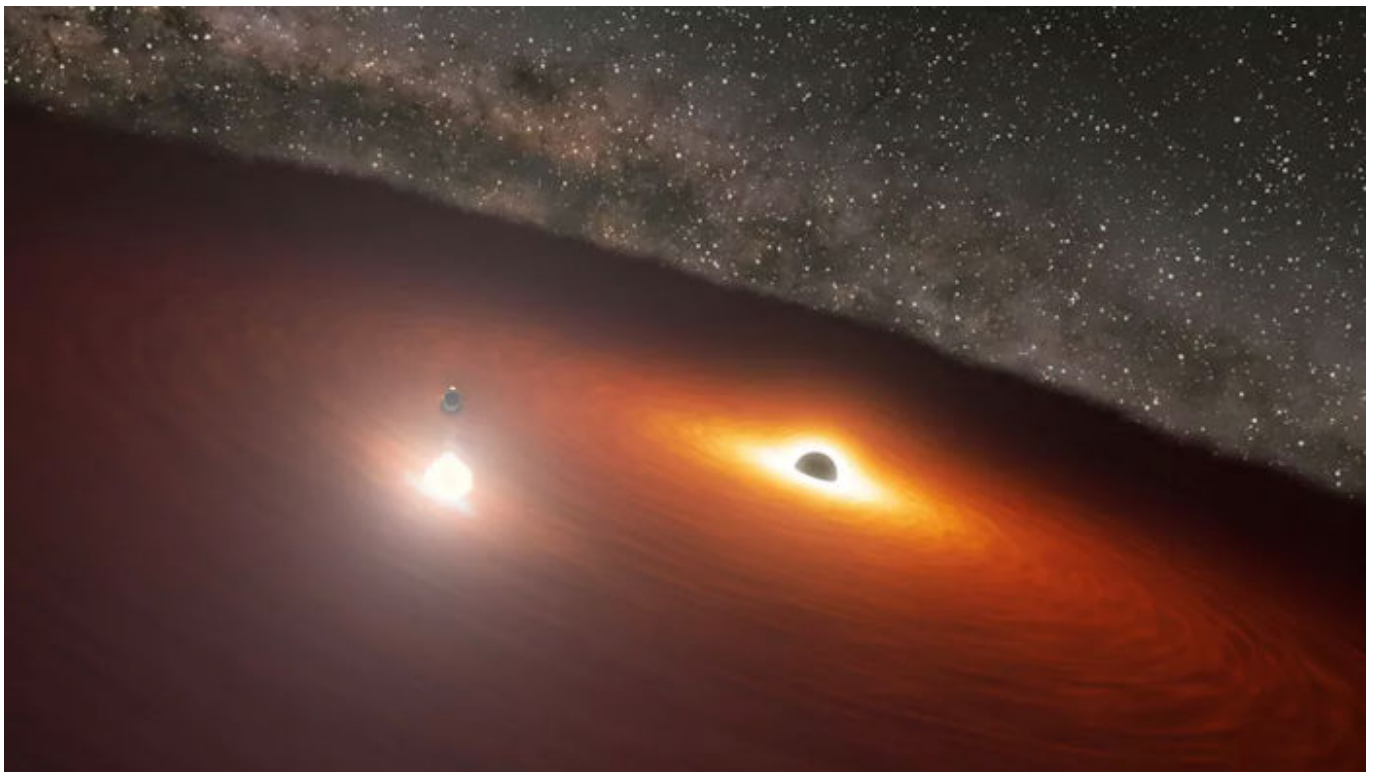


On June 5, 2023, NASA [released](#) a new composite image from the James Webb Space Telescope ([JWST](#)). It shows our universe when it was less than 600 million years old. And, you can explore *more than 45,000 baby galaxies* in this image, especially if you [zoom into the large interactive image](#).

Our universe is thought to be more than 13 billion years old. So – at 600 million years – the cosmos was in its infancy. The galaxies had just formed from the expanding cloud of most hydrogen gas, moving outward from the [Big Bang](#).

[Click here to read the complete article.](#)

**“Brilliant gamma-ray flare
100 times brighter than our
entire galaxy reveals 1
monster black hole is
actually 2”**

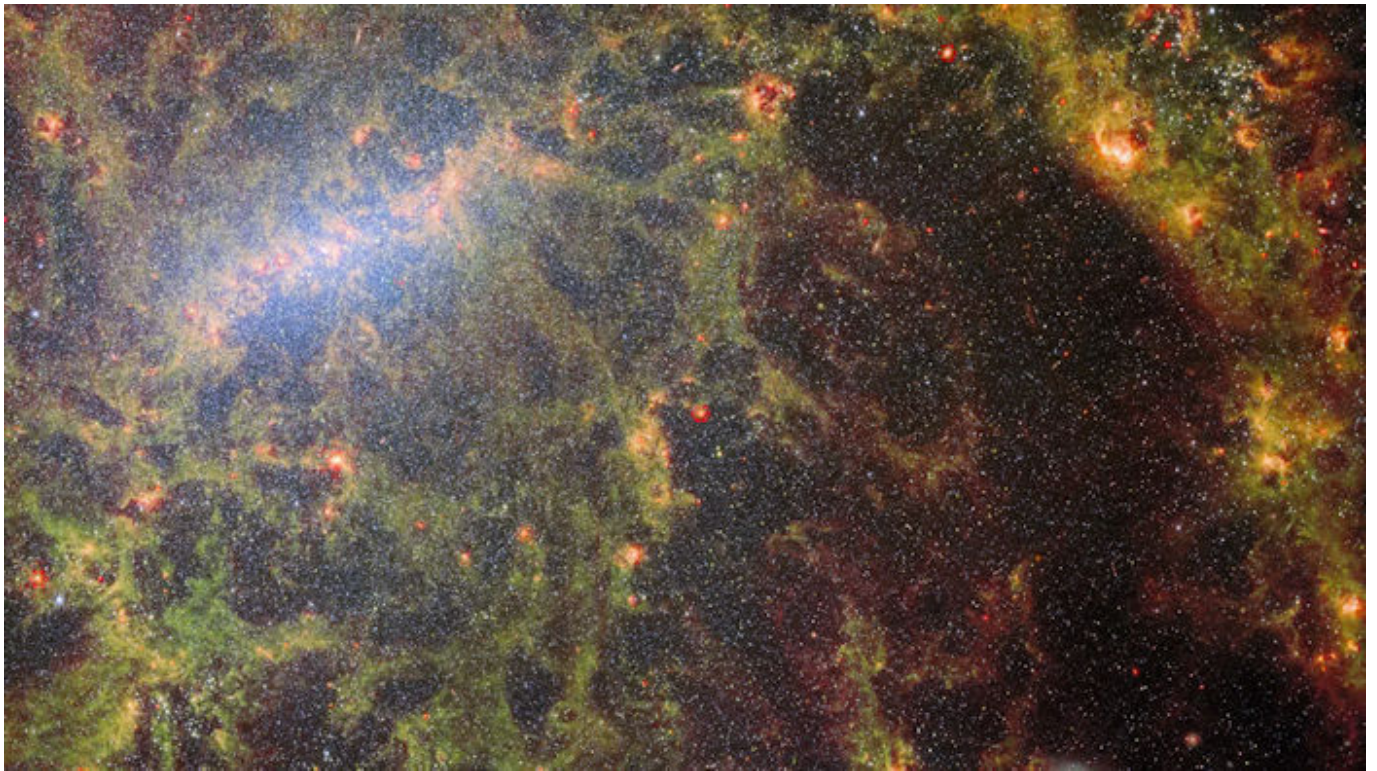


Astronomers have confirmed the presence of a second supermassive black hole in the turbulent heart of a distant galaxy.

The scientists also found that both of these cosmic monsters are feeding on gas and dust and that one has a peculiar oblong orbit that sends it plunging through a massive disk of red-hot dust and gas around its companion.

[Click here to read the full article.](#)

“Webb telescope captures galaxy 20 million light-years away | CNN”



The James Webb Space Telescope set its sights on a galaxy 20 million [light-years](#) away, capturing a dazzling star-forming galaxy in images streaked with the signature of passing asteroids.

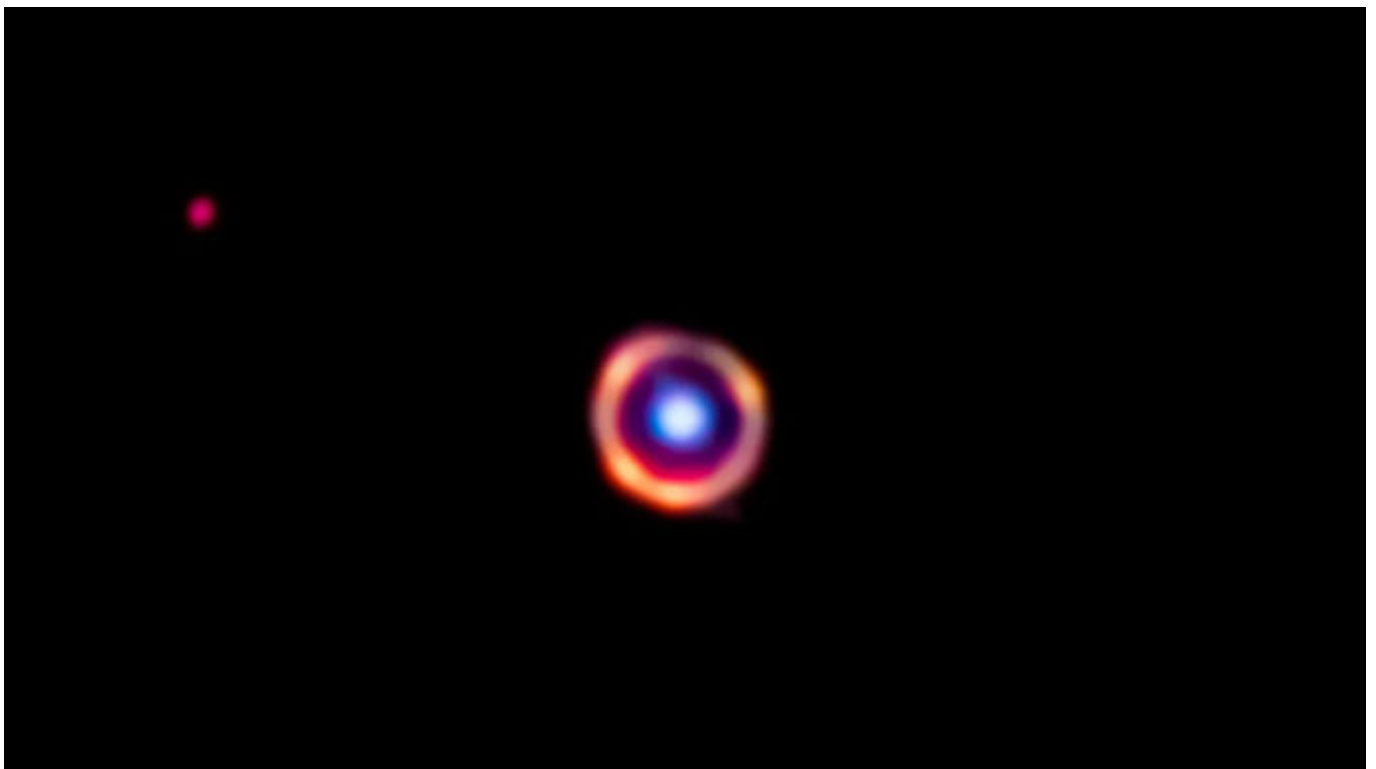
A bright band in the upper left corner of the images shows the bright, bar-shaped center of the galaxy, according to a NASA [news release](#).

The NGC 5068 galaxy is a barred spiral galaxy, the same type as our home Milky

[Click here to read the complete article.](#)

Link contributed by Gene Savoy, Jr.

“Webb telescope detects organic molecules in distant galaxy | CNN”



Astronomers have detected the most distant known organic molecules in the universe using the James Webb Space Telescope. It's the first time Webb has detected complex molecules in the distant universe.

The complex molecules were found in a galaxy known as SPT0418-47, located more than 12 billion [light-years](#) away.

The discovery sheds light on the chemical interactions that occurred within the earliest galaxies in the universe and how they relate to star formation.

[Click here to read the complete article.](#)

Link contributed by Gene Savoy, Jr.

“Timelapse of Europa & Io orbiting Jupiter, as captured by the Cassini space probe”

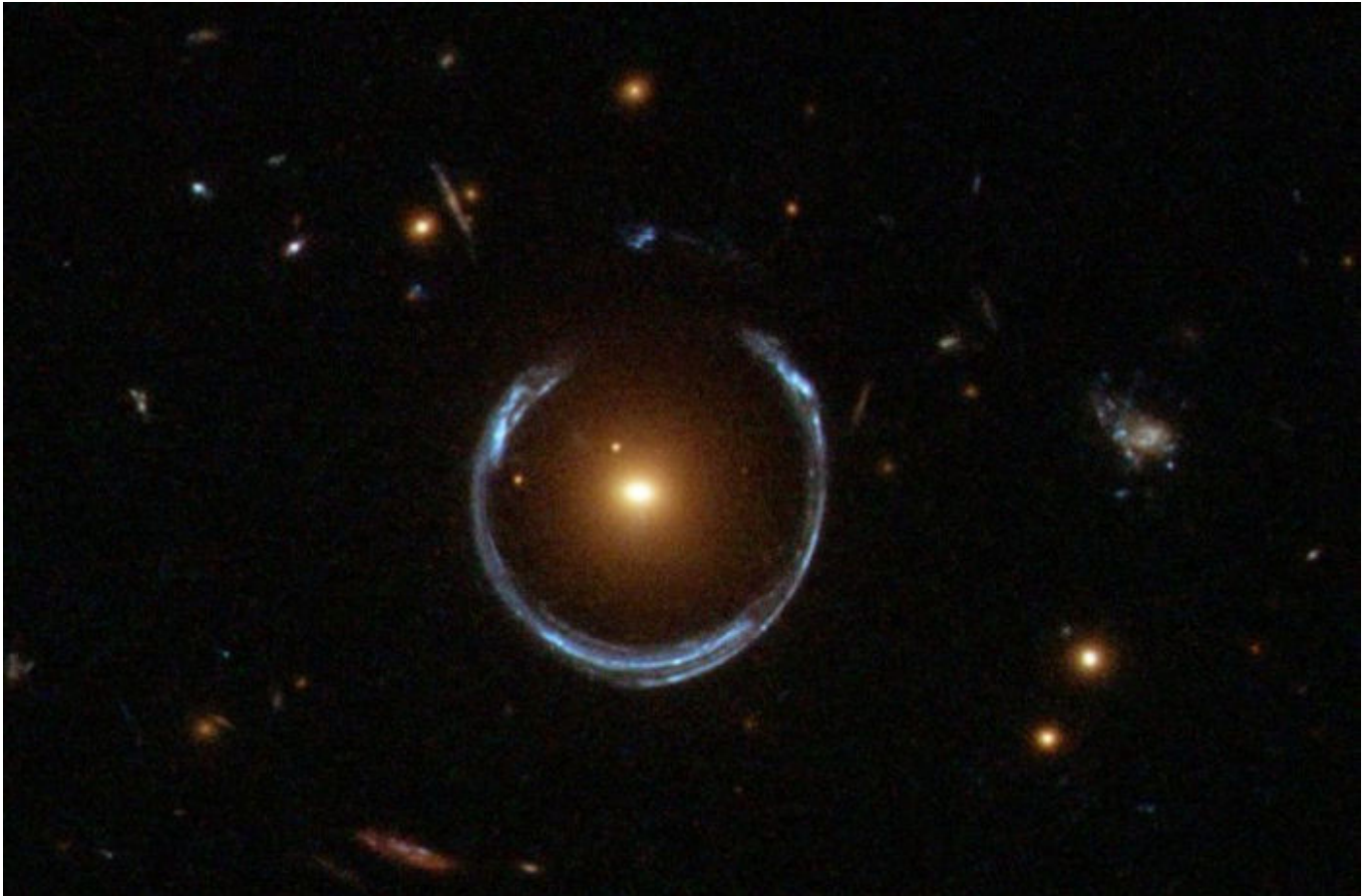


This interesting time-lapse video shows two of Jupiter's moons, Europa and Io, moving across the face of the giant planet.

[Click here to view the video.](#)

**“ESA/Hubble Picture of the
Week Prompts New**

Understanding of Einstein Ring”



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In December 2020 ESA/Hubble [published an image](#) in the Picture of the Week series depicting GAL-CLUS-022058s, located in the southern hemisphere constellation of Fornax (The Furnace). The image shows the largest and one of the most complete Einstein rings ever discovered, and was nicknamed the “Molten Ring” by the Hubble observation’s Principal Investigator, which alludes to its appearance and host constellation.

□□First theorized to exist by Einstein in his general theory of relativity, this object’s unusual shape can be explained by

a process called [gravitational lensing](#), which causes light shining from far away to be bent and pulled by the gravity of an object between its source and the observer.

[Read the entire article here.](#)

“RED GALAXIES AT NIGHT, ASTRONOMERS’ DELIGHT: A LOOK AT THE “HUBBLE-DARK” UNIVERSE”

JWST has given us a new look at galaxies as they were in the first few billion years of the universe. Among the newly discovered galaxies is a population of flat, red, extended disks that may have been entirely missed by previous surveys.

To understand how today's galaxies came to be as they are, we need to study galaxies in the distant past. Among the galaxies we know to have existed at redshift (z) greater than 2 – up to when the universe was a little more than 3 billion years old – are massive, dusty galaxies forming stars at a furious rate.

[Read the entire article here.](#)