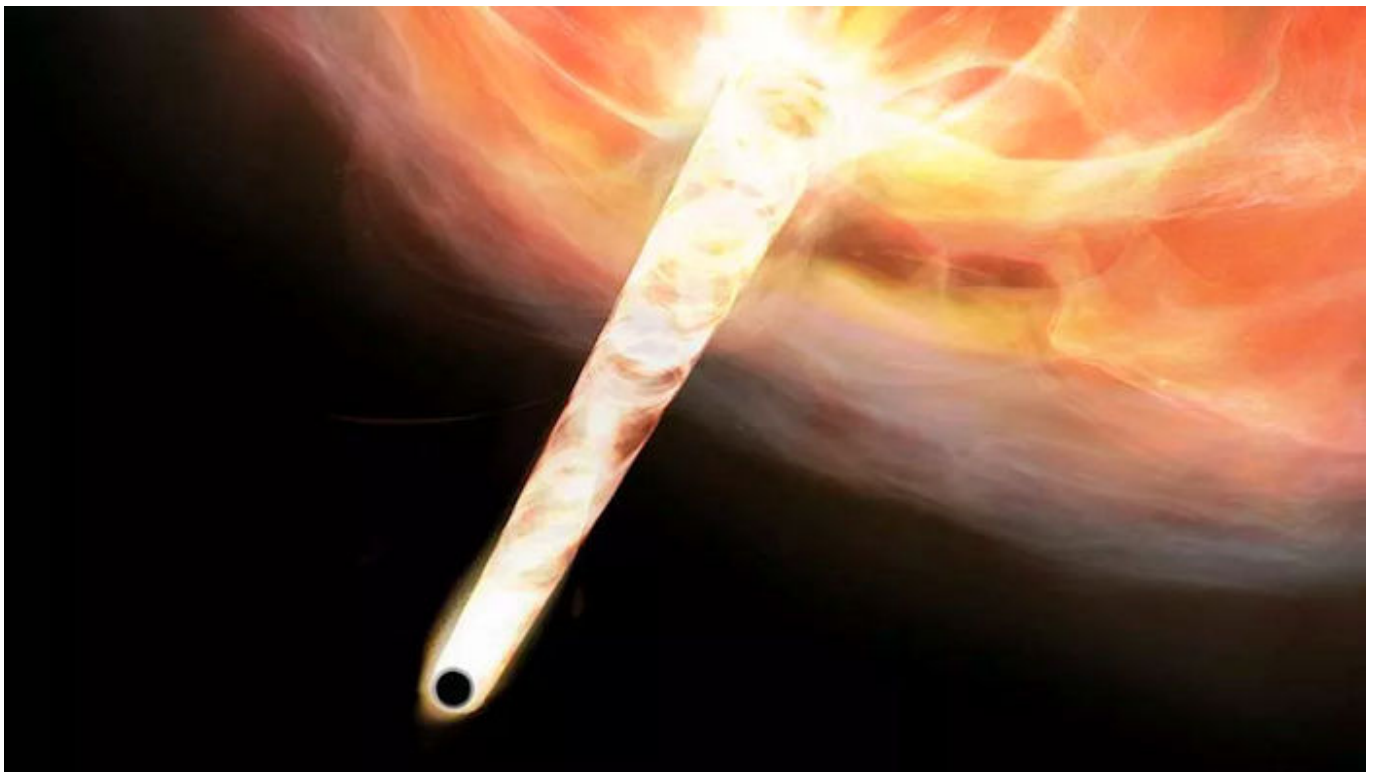


“ ‘Runaway’ black hole the size of 20 million suns found speeding through space with a trail of newborn stars behind it”



Astronomers have spotted a runaway supermassive black hole, seemingly ejected from its home galaxy and racing through space with a chain of stars trailing in its wake.

According to the team's research, which was published on the pre-print server [arXiv.org](https://arxiv.org) (opens in new tab) and has been accepted for publication in The Astrophysical Journal Letters, the discovery offers the first observational evidence that

supermassive black holes can be ejected from their home galaxies to roam interstellar space.

[Read the full article here.](#)

“Bright planets Venus-Jupiter 2023: Great photos here”

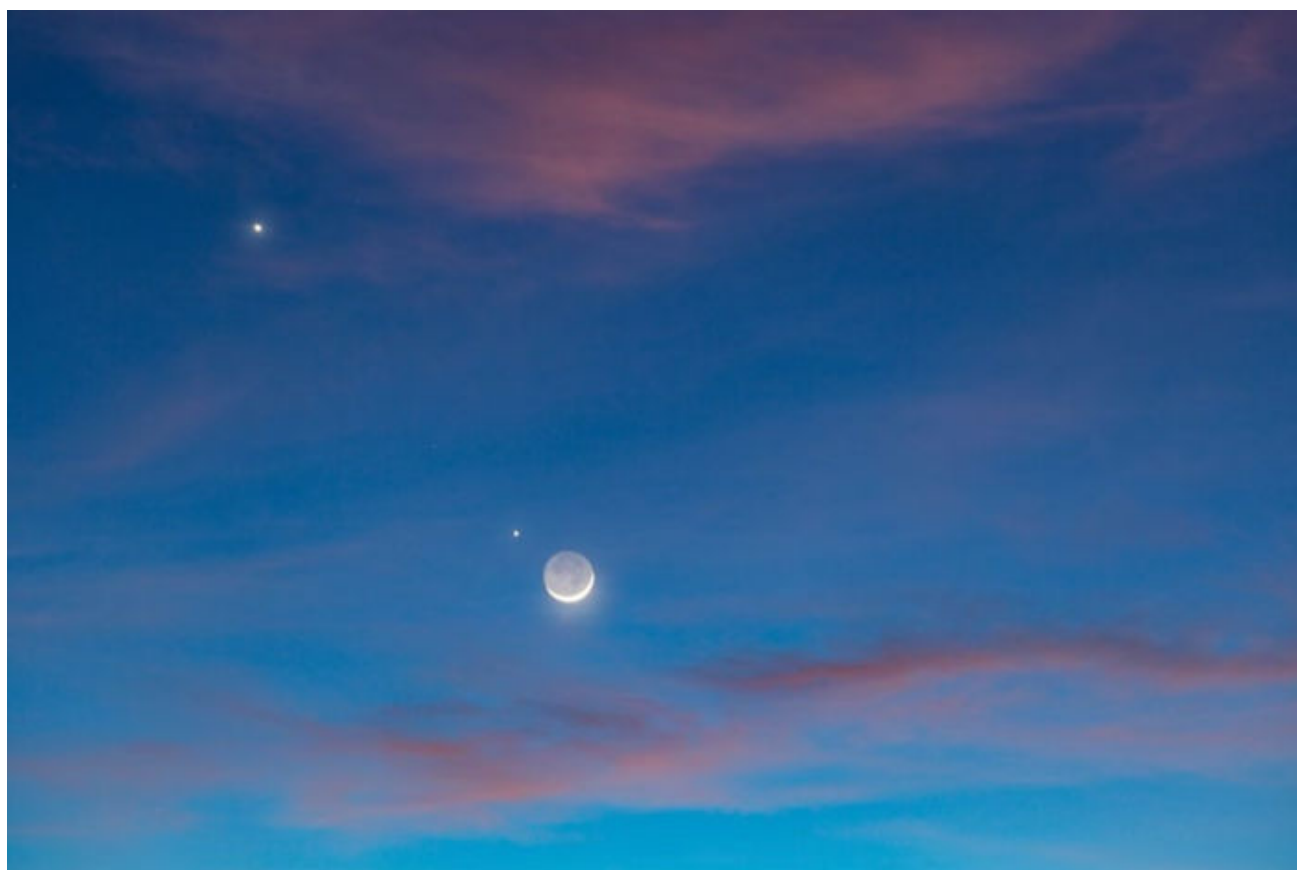


Photo by David Constante

Photo by David Constante

Thank you to all who submit images to EarthSky Community Photos! [View community photos here](#). We love you all. [Submit your photo here](#).

[Soumyadeep Mukherjee](#) of Dhanbad, India, captured photos of Venus and Jupiter heading toward conjunction on March 1-2, 2023, and wrote: “For the last couple of weeks, Venus and Jupiter have stolen the attention of astrophotographers! They were inching close to one another, slowly but surely.



Photo by David Constante

Photo by David Constante

[Read the entire article here.](#)

**“Scientists Make a rare find:
A Solar system with three
Super-Earths”**



Three Super-Earths and two Super-Mercuries, a type of planet that is extraordinarily rare and distinct, have been found in a star system by astronomers. Super-Mercuries are so uncommon—only eight have been found so far—that they are extremely rare.

ESPRESSO's spectrograph detected two 'super-Mercury' worlds in the star system HD 23472. Astronomers have discovered that these planets are extremely rare. This study, published in *Astronomy & Astrophysics*, looked at how the composition of tiny planets varies with planet position, temperature, and star attributes.

[Read the full article here.](#)

**“NASA image reveals hidden
sunlight that may help solve
solar mystery”**

As a new series of NASA observations show, there's a lot more to sunlight than meets the eye.

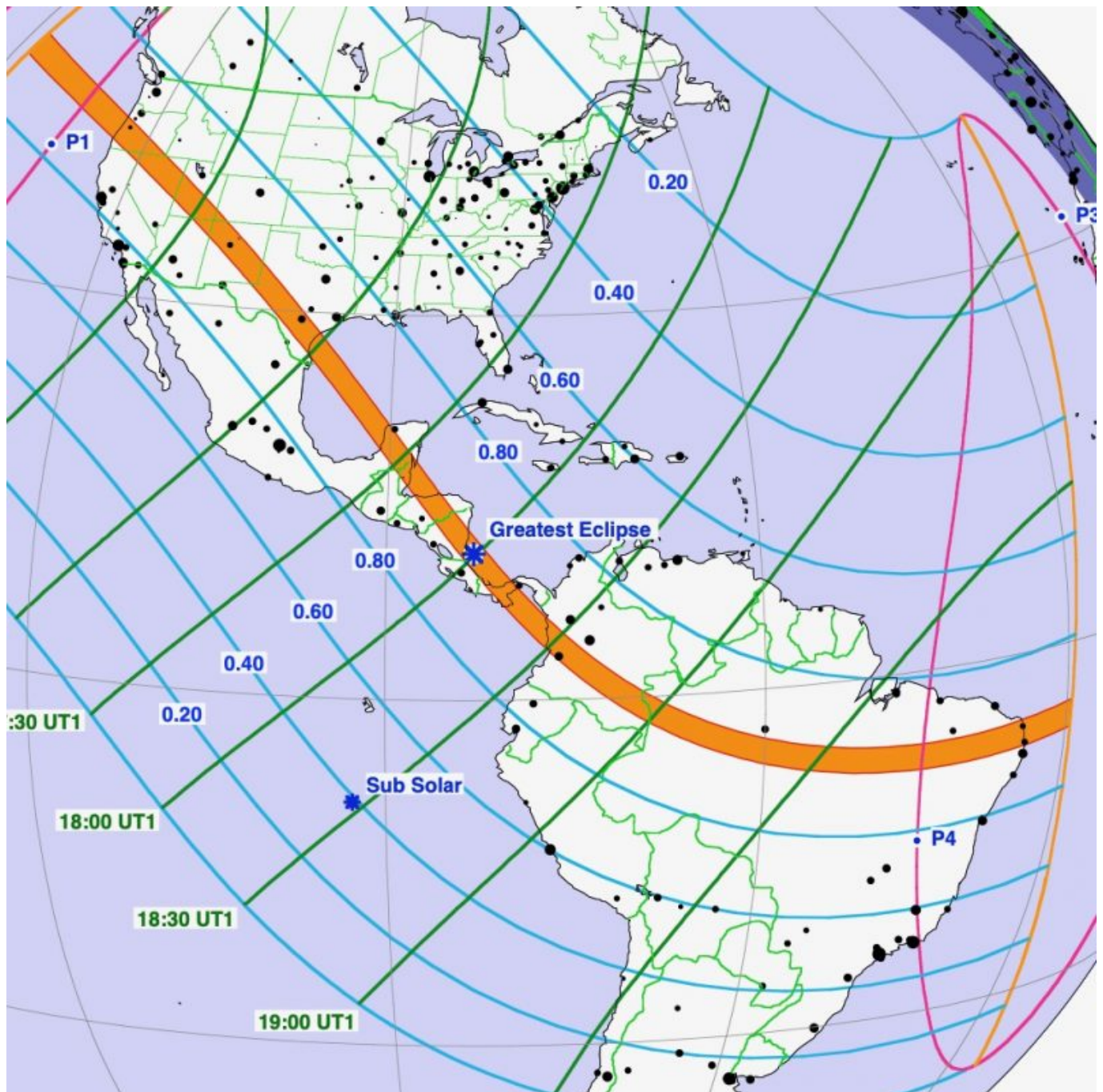
New observations by NASA's Nuclear Spectroscopic Telescope Array (NuSTAR) revealed patterns of high-energy light from the Sun that are not visible to the human eye.

This hidden light could help solve a mystery related to our host star's incredibly hot outer atmosphere, the corona.

[Read the full article here.](#)

Link contributed by Marilyn Taylor.

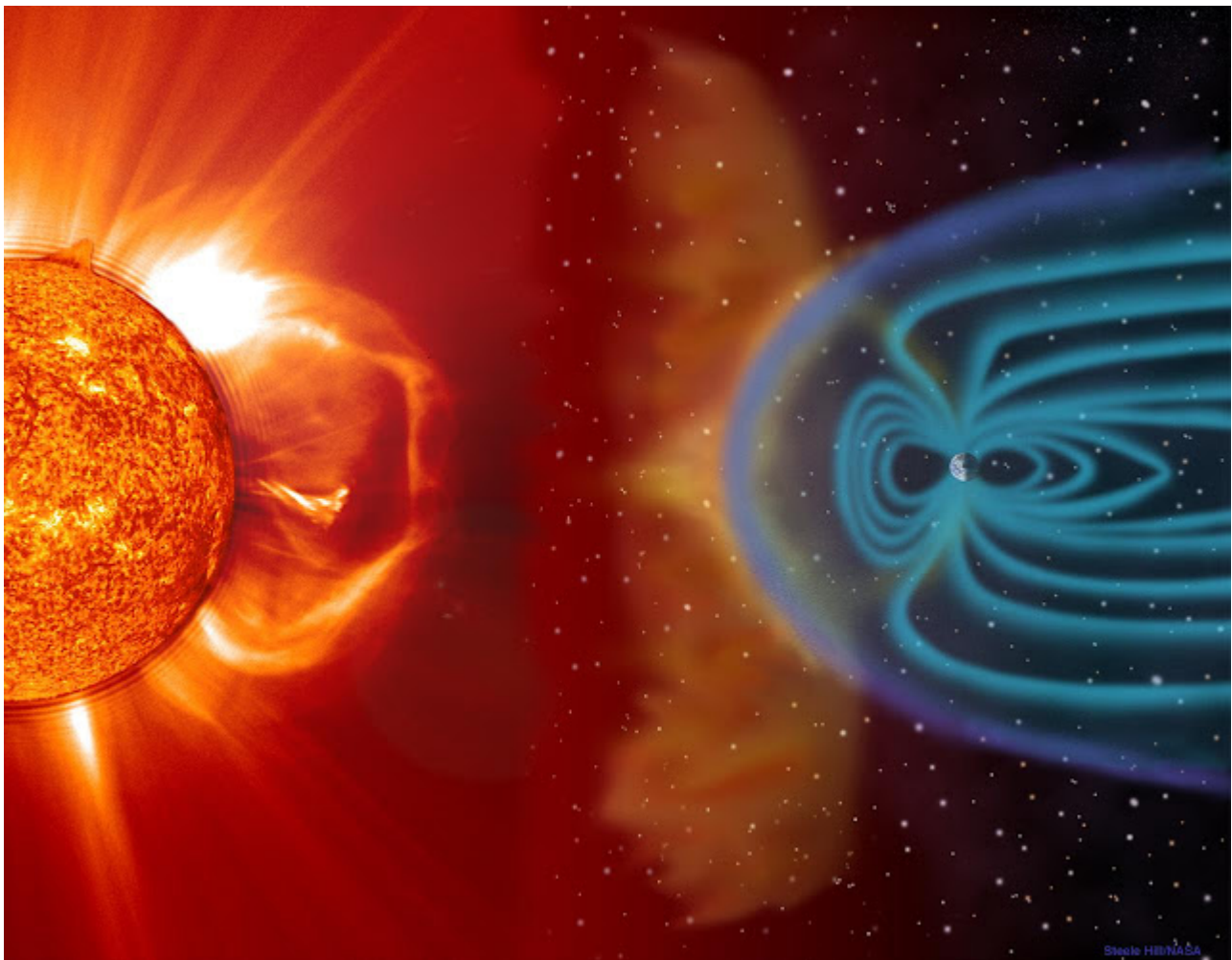
“Annular Solar Eclipse of October 14, 2023”



A big [eclipse event](#) for us in North America comes on October 14, 2023. Viewers along a narrow path in North, Central and South America will see an [annular solar eclipse](#). At mid-eclipse, the moon – in a distant part of its orbit – will pass directly in front of the sun. But the sun – slightly larger in the sky on that day than the moon – will appear as a bright ring, or annulus, around the moon. Even for those along the eclipse path, eclipse glasses will be needed throughout. Still ... a fascinating event!

[Read the full article here.](#)

“To Link The Earth And The Sun A Magnetic Gate Will Open, Every 8 Minutes”



According to NASA, a magnetic gateway will open, linking the Earth and the Sun at a distance of 150 million kilometers.

Hundreds of thousands of high-energy particles will travel through this gap until it shuts around the time you reach the bottom of the page.

According to space physicist David Seebeck of NASA's Goddard Space Flight Center, it's known as a "flux transfer event" or "FTE." "I was convinced they didn't exist in 1998, but the proof is now irrefutable." Indeed, David Seebeck established their existence in 2008 at a plasma conference in Huntsville, Alabama, where he presented his findings to a worldwide gathering of space physicists.

[Read the full article here.](#)

"Webb telescope sees once invisible structures inside spiral galaxies | CNN"



Astronomers have used the [James Webb Space Telescope](#) to peer inside the heart of [spiral galaxies](#), where young stars carve out glowing paths.

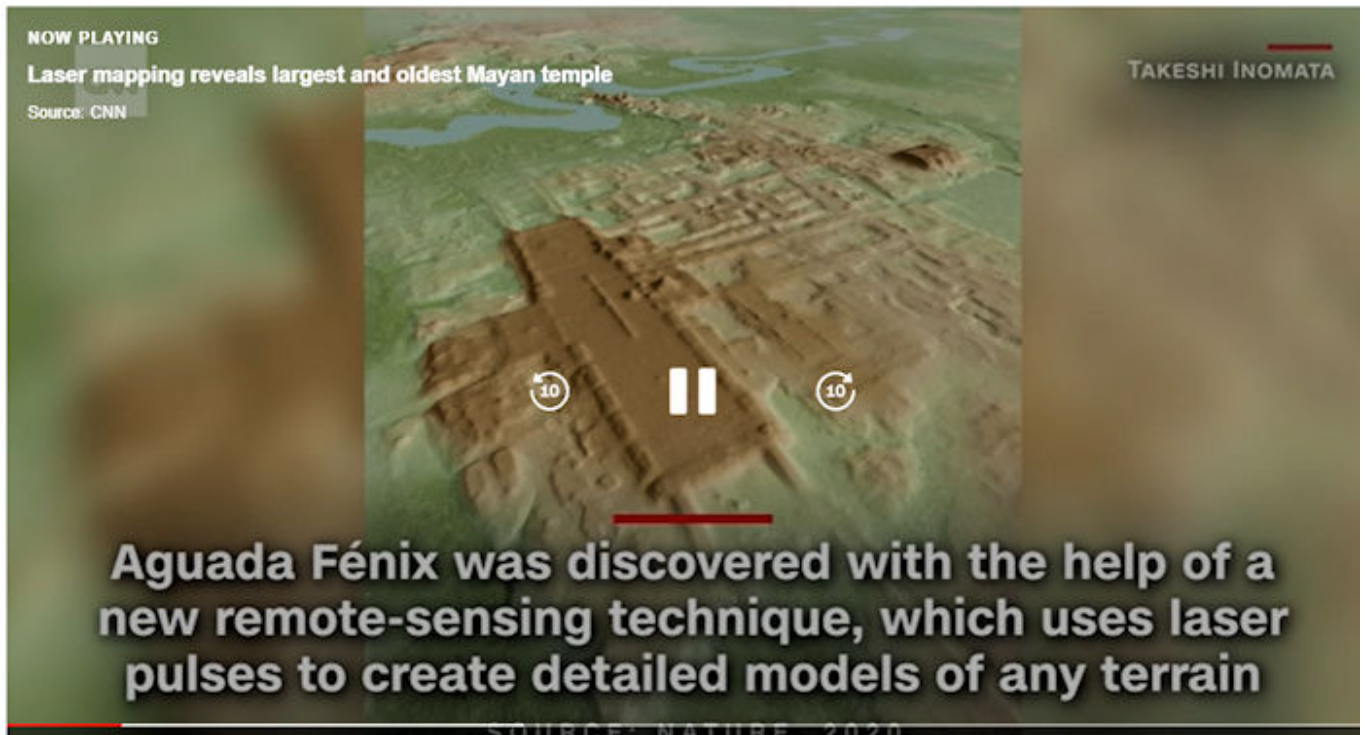
The space observatory can see the universe in infrared light, which is invisible to the human eye, making the telescope uniquely poised to look through the dust that obscures some galactic features when less powerful telescopes are used.

[Link to the full article.](#)

Article contributed by Gene Savoy, Jr.

“Laser mapping technology

reveals sprawling, interconnected Maya site | CNN”



With the thick vegetation of the northern Guatemala rainforests hiding its 2,000-year-old remnants, the full extent of the early Mayan way of life was once impossible to see. But laser technology has helped researchers discover a previously unknown 650-square-mile (1,683-square-kilometer) Maya site that offers startling new insights about ancient Mesoamericans and their civilization.

The researchers detected the vast site within the Mirador-Calakmul Karst Basin of northern Guatemala by using [LiDAR \(light detection and ranging\)](#) technology, a laser mapping system that allows for structures to be detected below the

thick tree canopies. The resulting map showed an area composed of 964 settlements broken down into 417 interconnected Mayan cities, towns and villages.

[Read the full article here.](#)

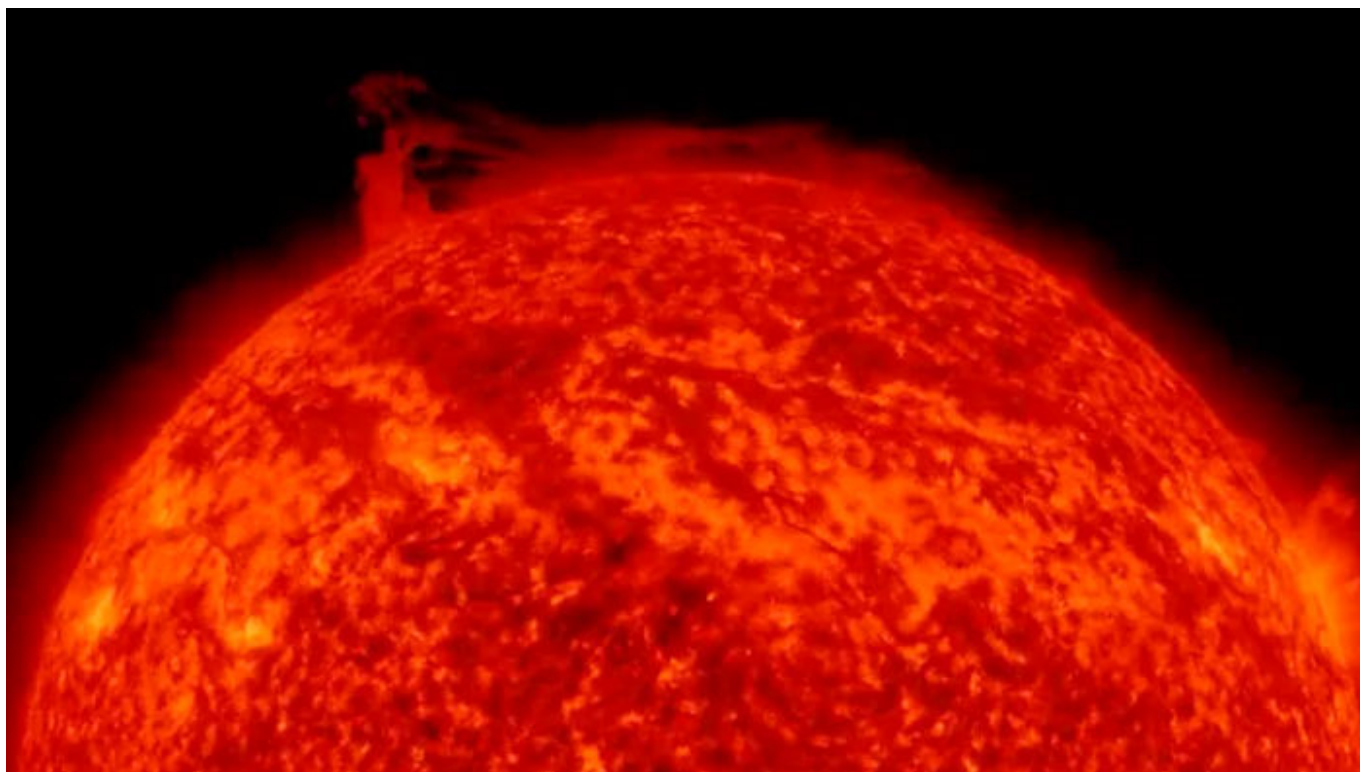
Link contributed by Gene Savoy, Jr.

“Black holes as the Source of Mysterious Dark Energy”

Gravity *attracts*. But dark energy is thought to be a *repulsive* force that counteracts gravity and causes the universe to expand at an accelerating rate. The science world was buzzing late yesterday with news of new evidence showing black holes as the source of dark energy. The new study is the work of 17 astronomers in 9 countries, who searched through data spanning 9 billion years of cosmic history. They found that black holes could potentially explain the total amount of dark energy we measure in the universe today.

[A good video and an explainer here.](#)

“Enormous ‘polar vortex’ on the sun is unprecedented, scientists say”



On Feb. 2, a massive tentacle of plasma snapped apart in the sun's atmosphere before tumbling down, circling the star's north pole at thousands of miles a minute, and then disappearing – leaving scientists baffled.

The entire spectacle, which lasted about 8 hours, went viral on Twitter when [Tamitha Skov](#)(opens in new tab), a science communicator and research scientist at The Aerospace Corporation in California, [posted footage](#)(opens in new tab) of the event captured by NASA's Solar Dynamics Observatory.

[Read the full article here.](#)