

“A Mysterious Object Is Emitting Microwaves in Deep Space.”



- The Atacama Large Millimeter/submillimeter Array (ALMA) interferometer detected a strange object that appears to *only* be emitting microwaves near the Milky Way's center.
- Now, a new study compares this object to known celestial objects in this chaotic region of deep space. After doing so, the scientists behind the study discovered that none of the known objects' descriptions fit this

new object perfectly.

[Read the complete story here.](#)

“Scientists may have found an answer to the mystery of dark matter. It involves an unexpected byproduct | CNN”



For about 50 years, the scientific community has been grappling with a substantial problem: There isn't enough visible matter in the universe.

All the matter we can see – stars, planets, cosmic dust and everything in between – can't account for why the universe behaves as it does, and there must be five times as much of it around for researchers' observations to make sense, according to NASA. Scientists call that dark matter, because it does not interact with light and is invisible.

[Read the complete story here.](#)

“What is the heliosphere and how can we measure it?”



The sun warms the Earth, making it habitable for people and animals. But that's not all it does, and it affects a much larger area of space. The heliosphere, the area of space

influenced by the sun, is over a hundred times larger than the distance from the sun to the Earth.

The sun is a star that constantly emits a steady stream of plasma – highly energized ionized gas – called the solar wind. In addition to the constant solar wind, the sun also occasionally releases eruptions of plasma called coronal mass ejections, or CMEs.

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“Strange Radio Signal From Deep Space Baffles Scientists”



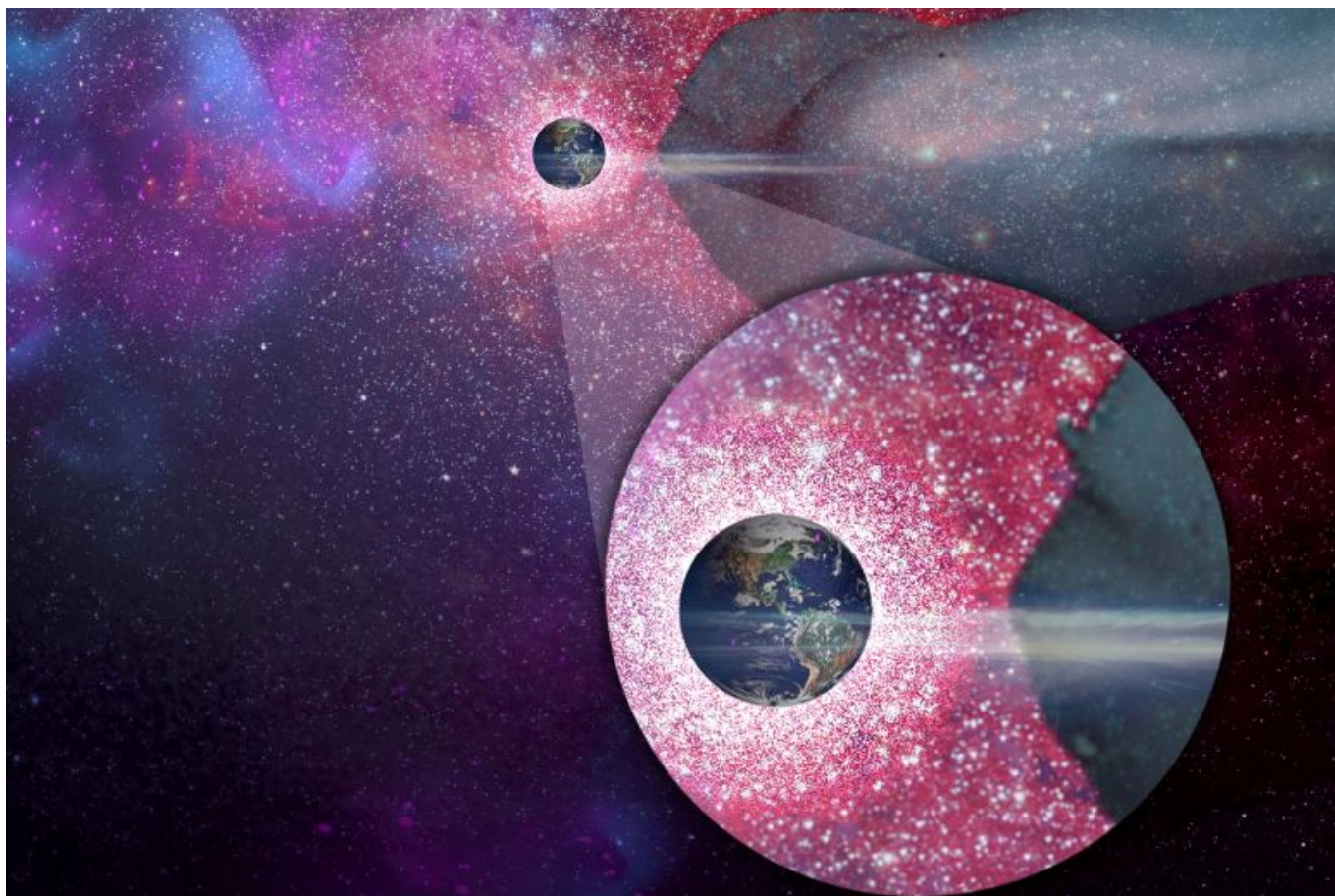
We’ve received a strange signal from across the galaxy, and astronomers are struggling to understand what it means.

They know what's emitting the signals. It's a neutron star named ASKAP J193505.1+214841.0 (ASKAP J1935+2148 for short), located in the plane of the Milky Way, some 15,820 light-years from Earth.

But the signals themselves are like none we've ever seen before. The star goes through periods of strong pulses, periods of weak pulses, and periods of no pulses at all.

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“Did Earth lose its protective bubble 2 million years ago?”



Earth rides through our home galaxy, the Milky Way, inside a protective bubble around our sun. Scientists call this bubble the heliosphere. It's essentially a cavity surrounding our local star, protecting our planet (and us) from the stronger radiation in the surrounding interstellar medium. But on June 10, 2024, a team of scientists said that, approximately 2 million years ago, the heliosphere might have shrunk. Earth might have been more directly exposed to the interstellar medium. These conditions might have left traces of heavier metals on Earth and could have cooled our climate for a time.

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“Blaze Star to go nova soon! Here’s how to see it”



- **A famous variable star** – T Coronae Borealis, or Blaze Star – should become visible to the unaided eye in 2024.
- **It could be a once-in-a-lifetime viewing opportunity**, since the star only becomes bright enough to see without optical aid every 80 years.
- **This star last erupted in 1946.** And astronomers believe it will do so again between now and September 2024. Learn how to spot its constellation now. Then prepare to be amazed when the “new” star, or nova, pops into view.

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

“We’ve Just Seen The First Galaxies in The Universe Being Born”

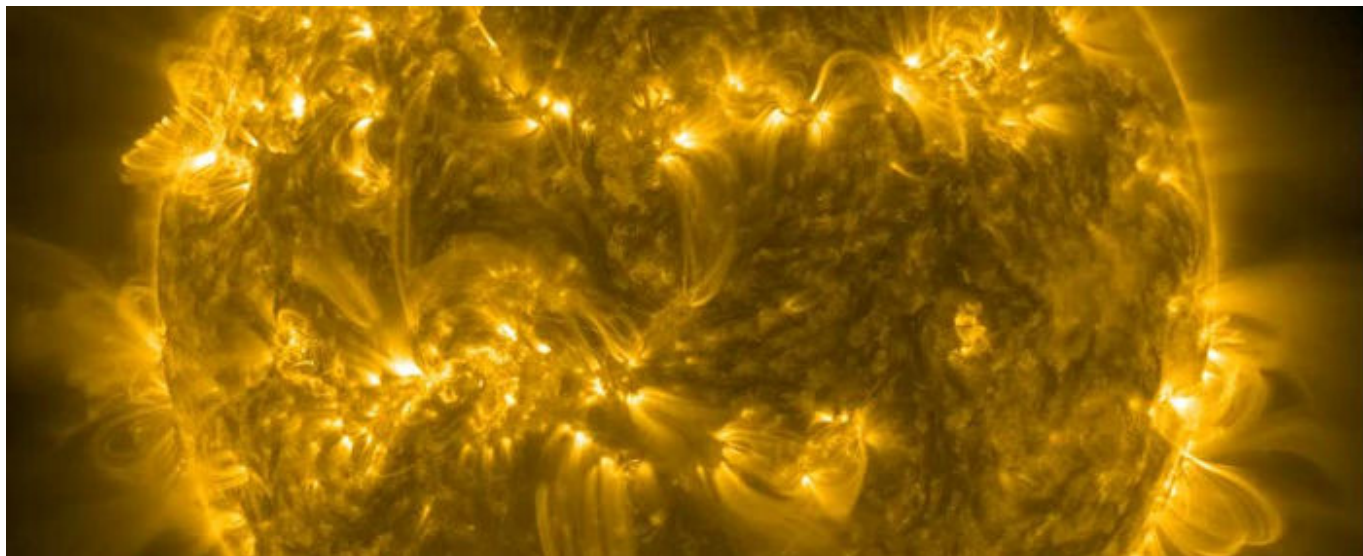


Scientists have just identified the formation processes of some of the Universe's earliest galaxies in the turbulent era of the Cosmic Dawn.

JWST observations of the early Universe around 13.3 to 13.4 billion years ago – just a few hundred million years after the Big Bang – have revealed telltale signs of gas reservoirs being actively slurped into three newly forming and growing galaxies.

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

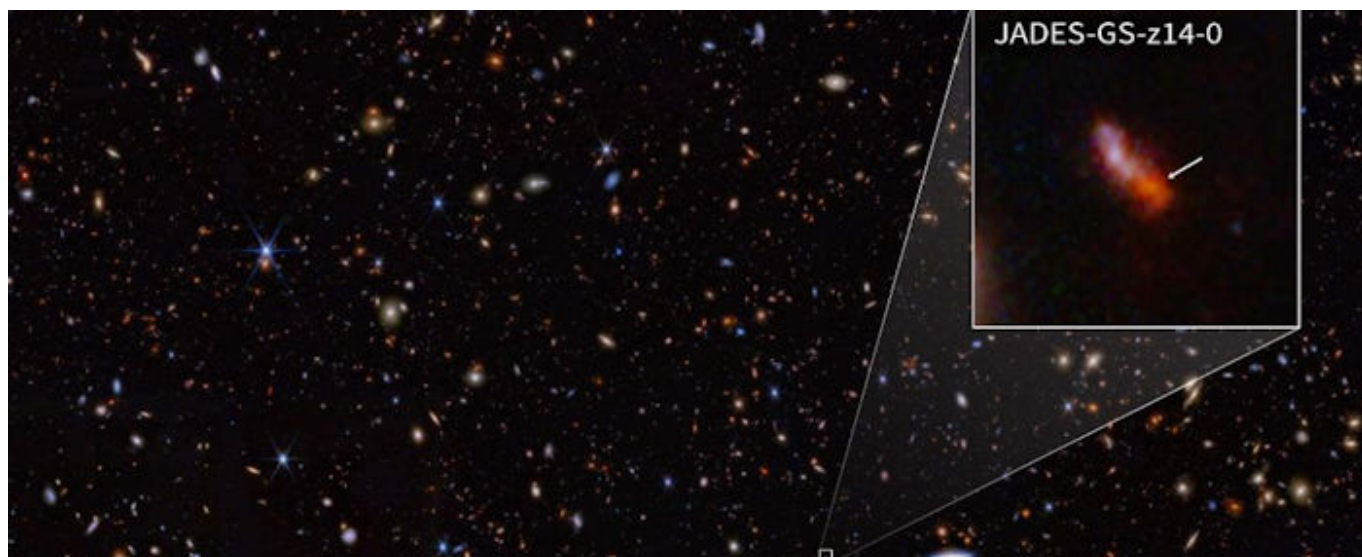
“The Sun Has a Mysterious Heartbeat, And We May Finally Know Why”



The heartbeat of the Sun is a complex, multi-rhythmic affair, beating in different ways according to various periodicities. We don't know what drives many of these solar heartbeats, but new findings revive and strengthen a link with the planets of the Solar System.

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

**“Whoa! Astronomers Just
Discovered The Earliest
Galaxy We’ve Ever Seen”**



A newly discovered galaxy has just smashed the record for the earliest seen yet, presenting a major challenge to our current models of galaxy formation.

It's called JADES-GS-z14-0, and it's brightly gleaming in the early Universe, as it looked less than 300 million years after the Big Bang. A second recent discovery, called JADES-GS-z14-1, was confirmed to be nearly as distant.

The detections, astronomers say, are now "unambiguous", which means the Cosmic Dawn might have some 'splainin' to do.

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

“'Death Star' Black Holes Can Rapidly Swivel Massive Beams

Onto New Targets”

In recent years astronomers have spotted signs that the jets of plasma particles fired out from supermassive black holes can actually change direction over time – and new research now shows the phenomenon can occur over a shockingly short time scale.

These jets are caused when heated material falling towards a black hole is channeled by powerful magnetic fields towards its poles and streamed back out into the cosmos. These beams of energy are thought to play an important role in star formation, so we need to know how they work.

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