
Beyond the
Beyond
Fletcher, Soul Traveler

Contents

Intro

I believe in synchronicity. A few days ago I had a dream that my next book was to be called Beyond the Beyond.

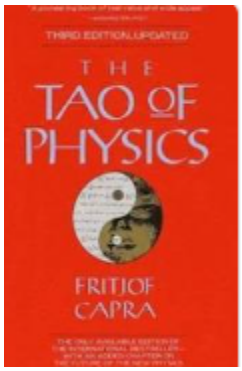
I'm fascinated by the James L. Web telescope. What they are discovering blows my mind.
After I had my dream and got up, I received a text message from my dear friend Amar.

Amar works for the same company that made the telescope. He gave me a link to one of the engineers who won a top prize in his field. This is one of the scientists he works with.
Literally across the street from him is the site where the great telescope was built.

Around 36 years ago I went to the Monroe institute for a week seminar. I remember watching a short movie that displayed the smallest to the largest and the largest back to the smallest.
It really blew my mind.

This book hopefully will help you to discover the joy of learning about your true nature from the smallest to the largest, from the largest to the smallest.

In my eyes, both the modern-day scientist and the ancient mystics are both talking about the same thing.



In the 1970s I read the book The Tao of Physics. In this book, you couldn't tell the difference between whether a scientist was talking about this or the ancient mystics.
I found it extremely fascinating. Both sites of the coin were talking about the same thing.
Maybe just maybe this book will help you get outside of your box.

Universe Size Comparison | Cosmic Eye (Original HD)

Scientificus • 8.3M views

This is the original landscape-format version of the short movie Cosmic Eye, designed by astrophysicist Danail Obreschkow. The...

Stunning James Webb Space Telescope photo shows merging galaxies shining with light of a trillion suns

Arp 220, found in the constellation Serpens (the Serpent), is an ultra-luminous infrared galaxy that shines brighter than more than 1 trillion suns, according to the Space Telescope Science Institute

[1]NASA's James Webb Space Telescope captured brilliant images of two spiral galaxies 250 million light-years away that have been merging for the last 700 million years.

Arp 220, found in the constellation Serpens (the Serpent), is an ultra-luminous infrared galaxy (ULIRG) that shines brighter than more than 1 trillion suns, according to the Space Telescope Science Institute (STScI).

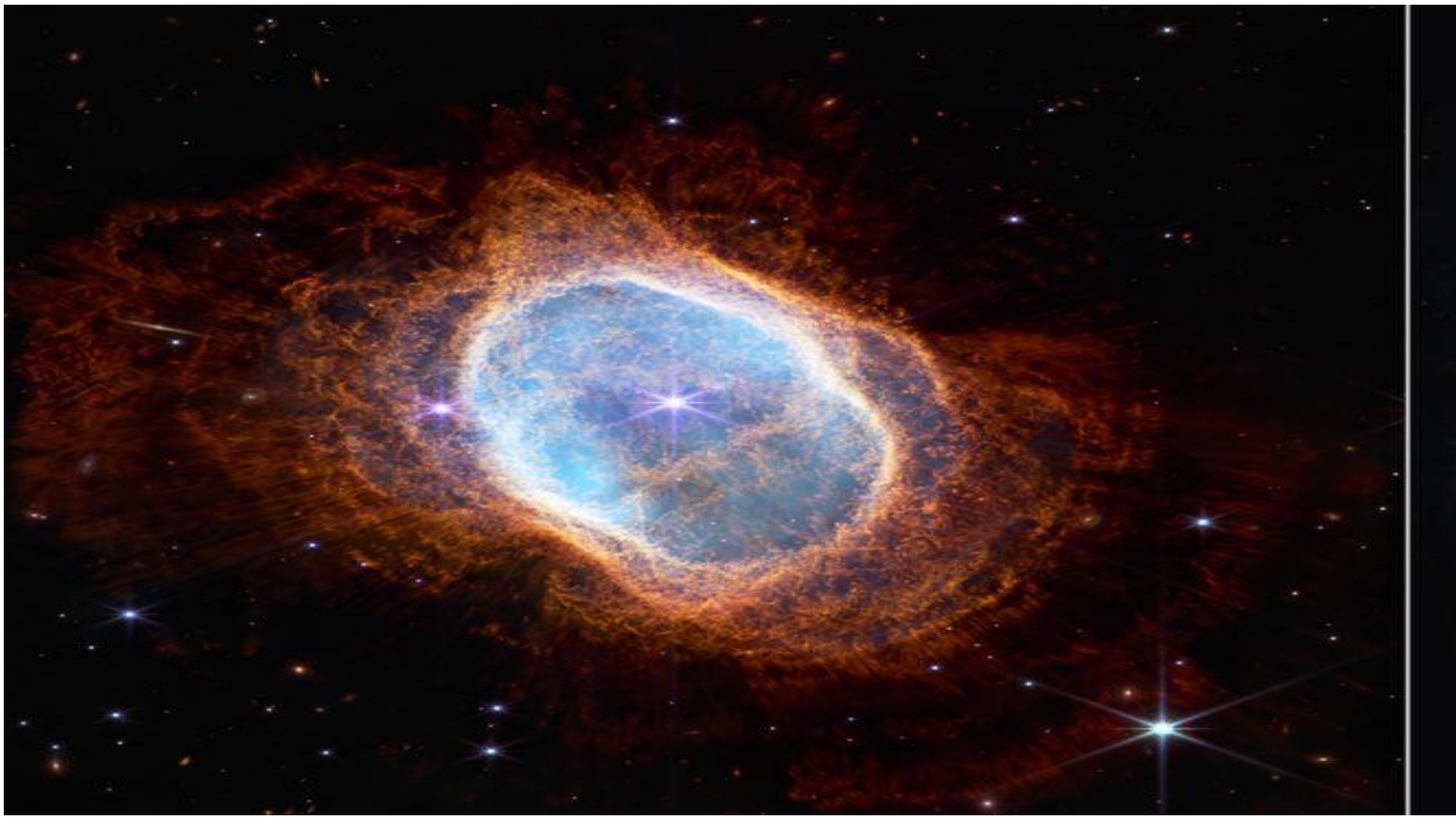
[1] https://www.foxweather.com/earth-space/nasa-james-webb-space-telescope-merging-galaxies-photo

In comparison, the STScI says the Milky Way doesn't shine as bright and has a luminosity of "only" about 10 billion suns.

Webb telescope captures glowing starburst as galaxies collide

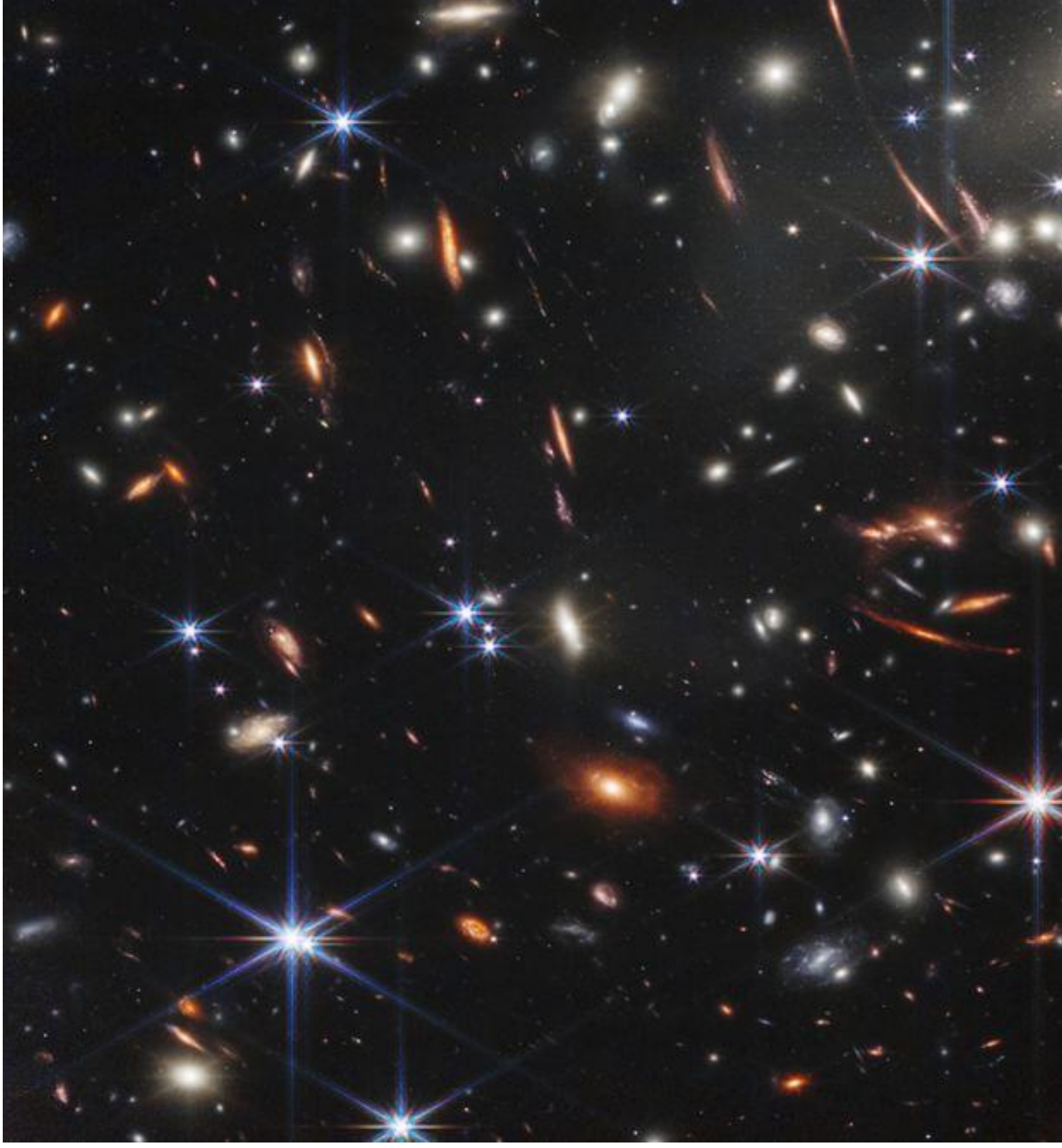
By Ashley Strickland, CNN

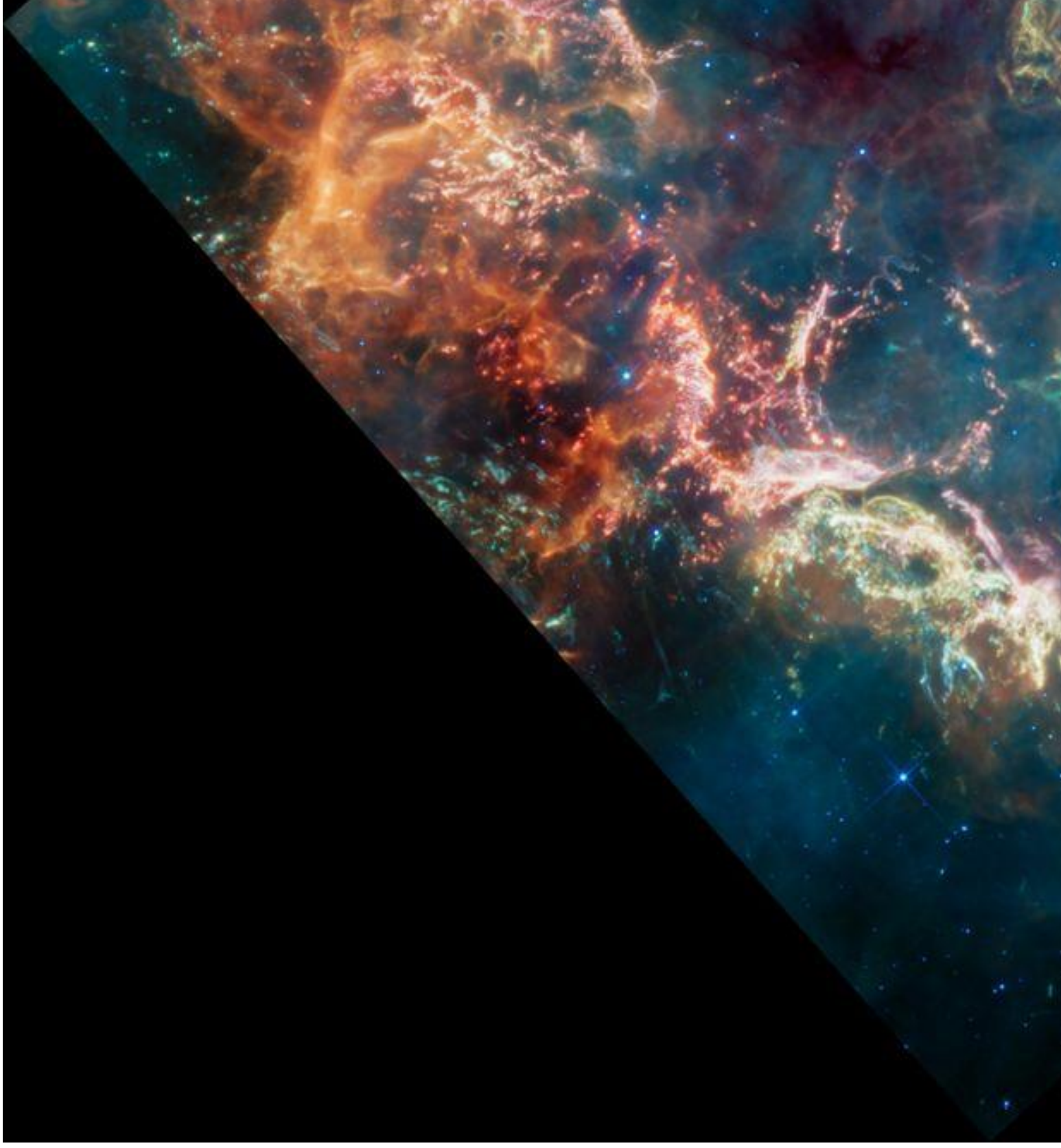
Updated 5:42 PM EDT, Mon April 17, 2023

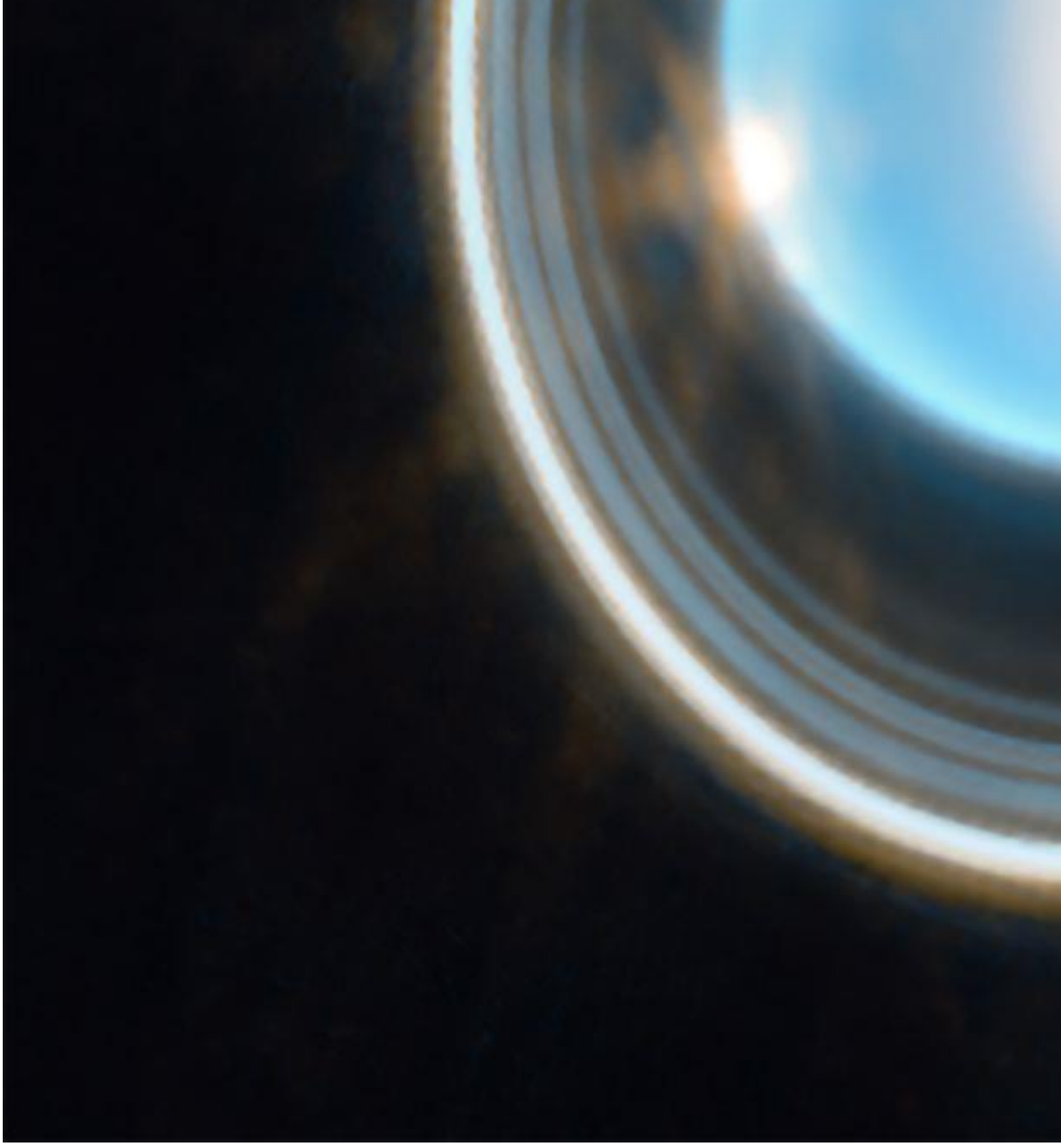


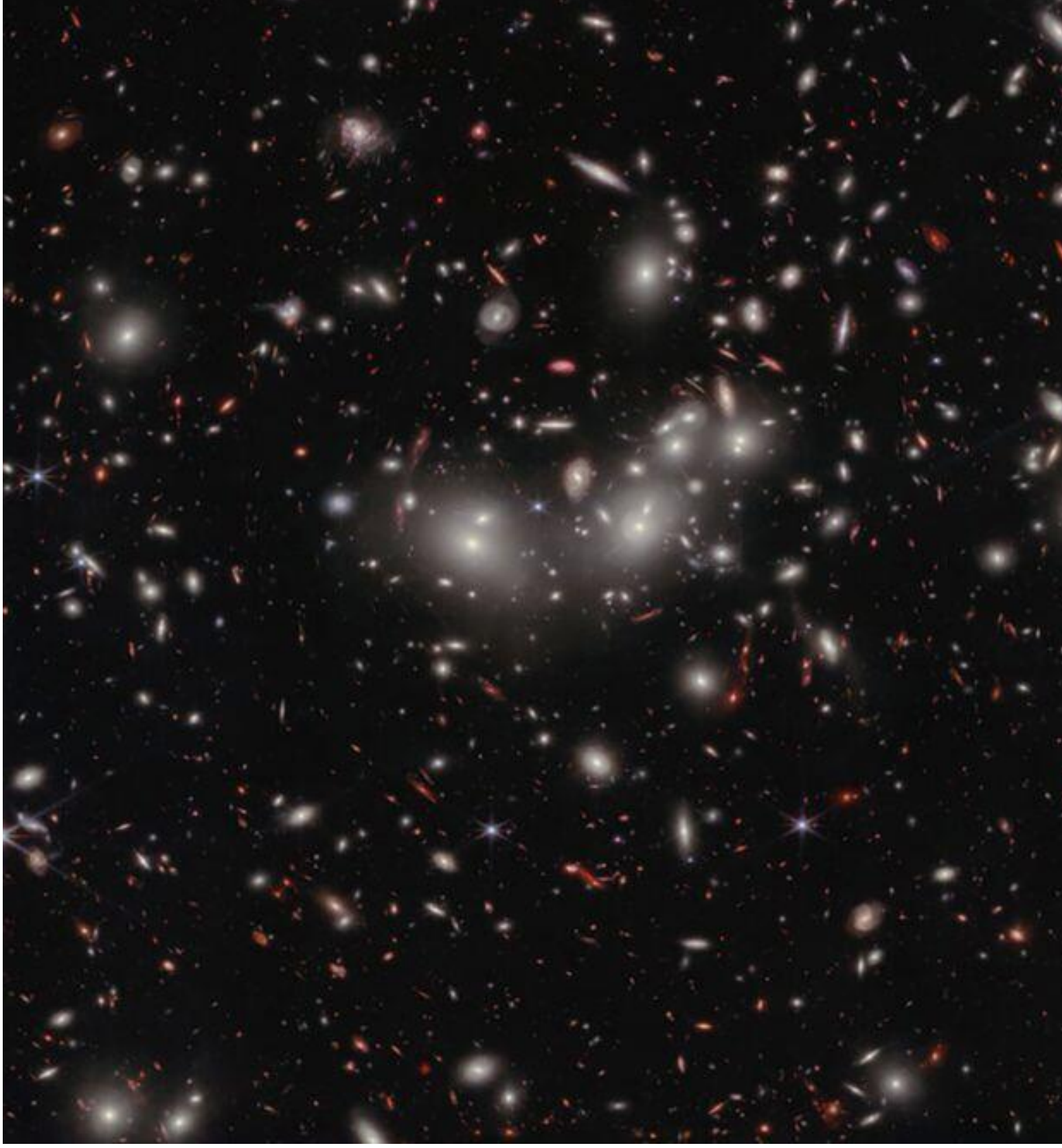
[2]Webb captured a burst of star formation triggered by two colliding spiral galaxies called Arp 220. The phenomenon is the closest ultra-luminous galactic merger to Earth.

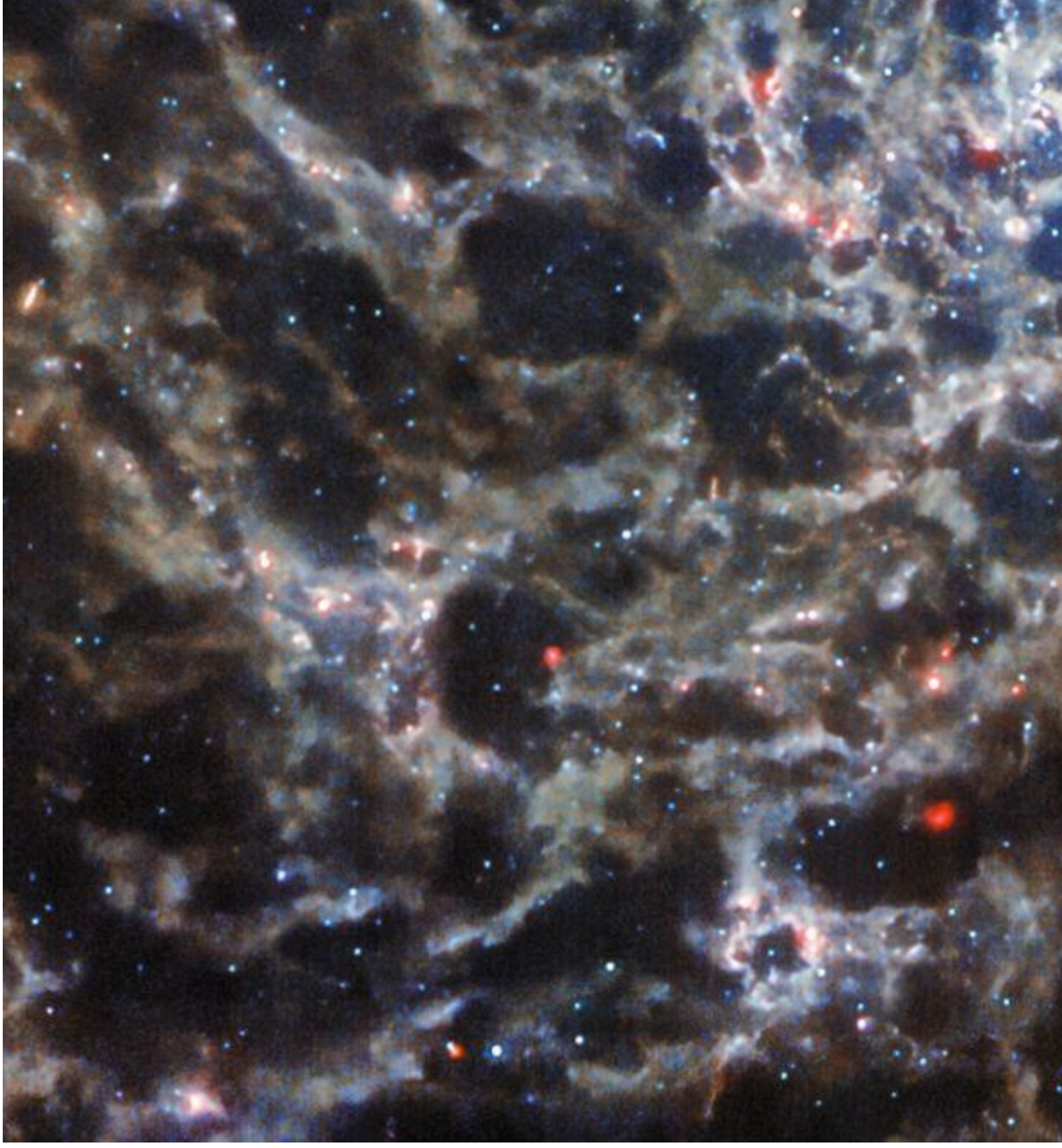
NASA/ESA/CSA/STScI

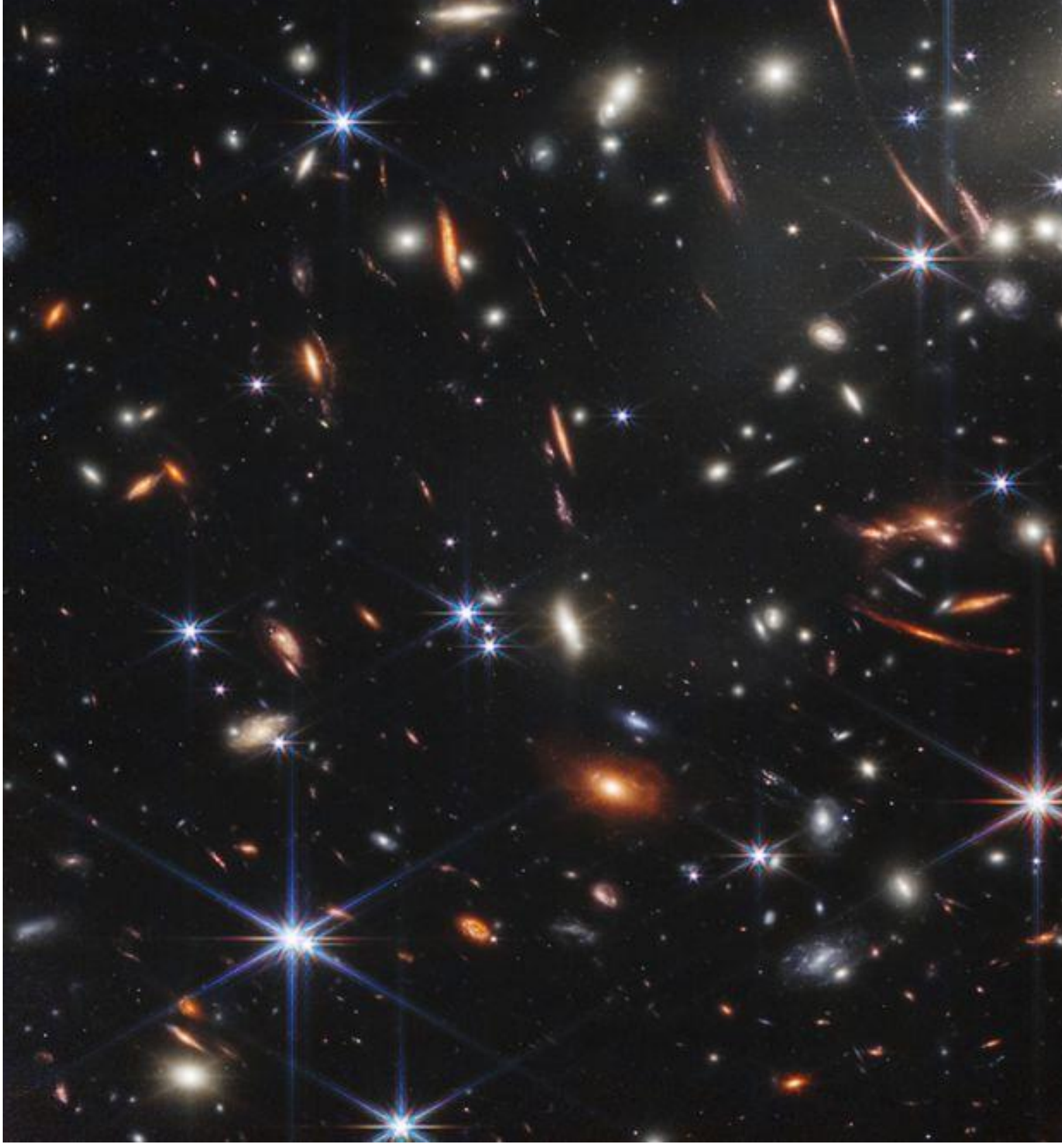












Observing the universe with the James Webb Space Telescope

CNN —

A brilliant starburst feature shines in the latest image taken by the James Webb Space Telescope.

The space observatory captured a bright burst of star formation triggered by two spiral galaxies crashing into one another.

The colliding galaxies, known collectively as Arp 220, generated an infrared glow that contains the light of more than 1 trillion suns. For comparison, the Milky Way galaxy has a luminosity that is the equivalent of about 10 billion suns.

Webb telescope captures 'green monster' inside a young supernova

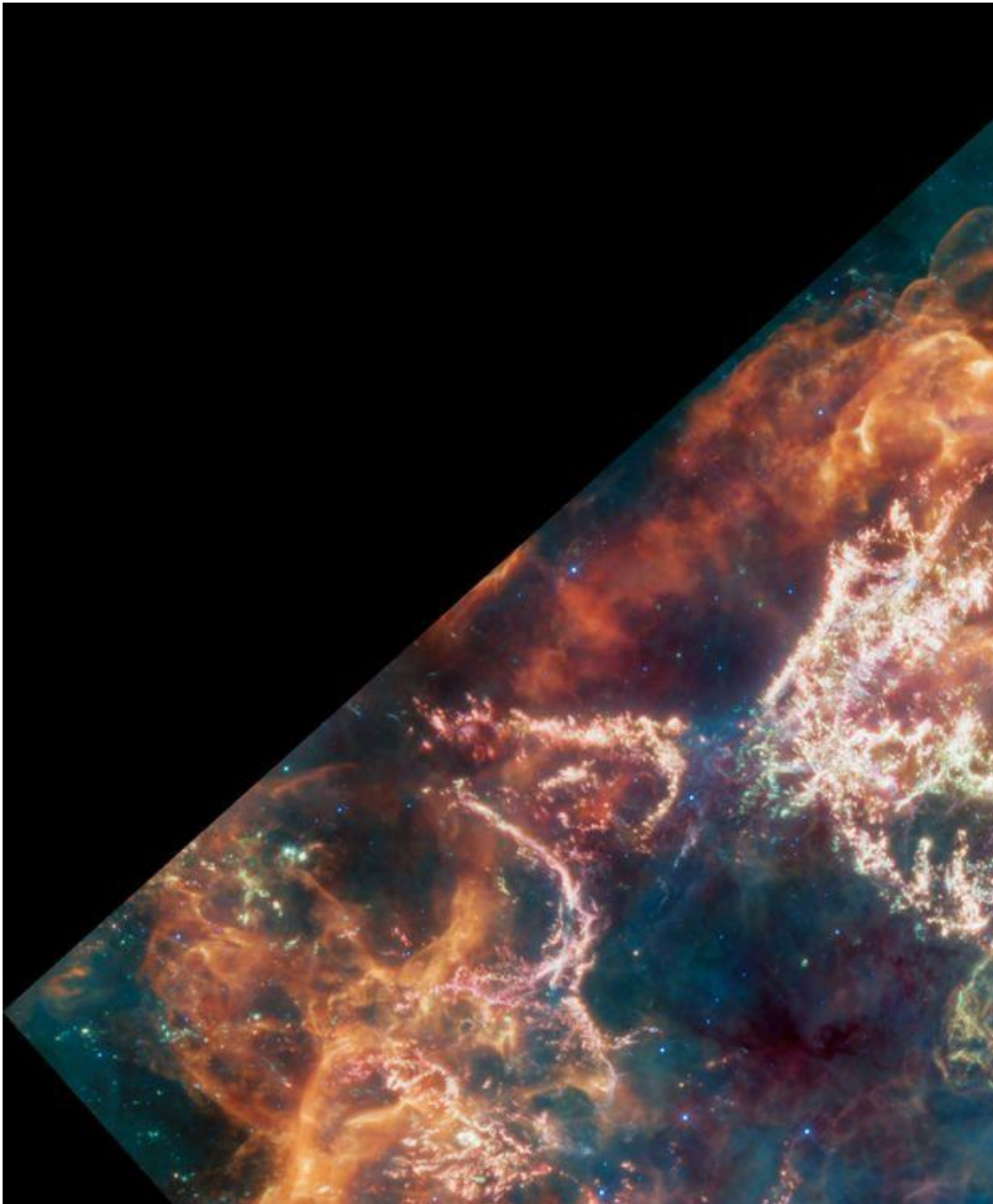
The scintillating light show from the ultra-luminous infrared galaxy is the spiked starburst feature at the center of the new Webb image, which was released on Monday.

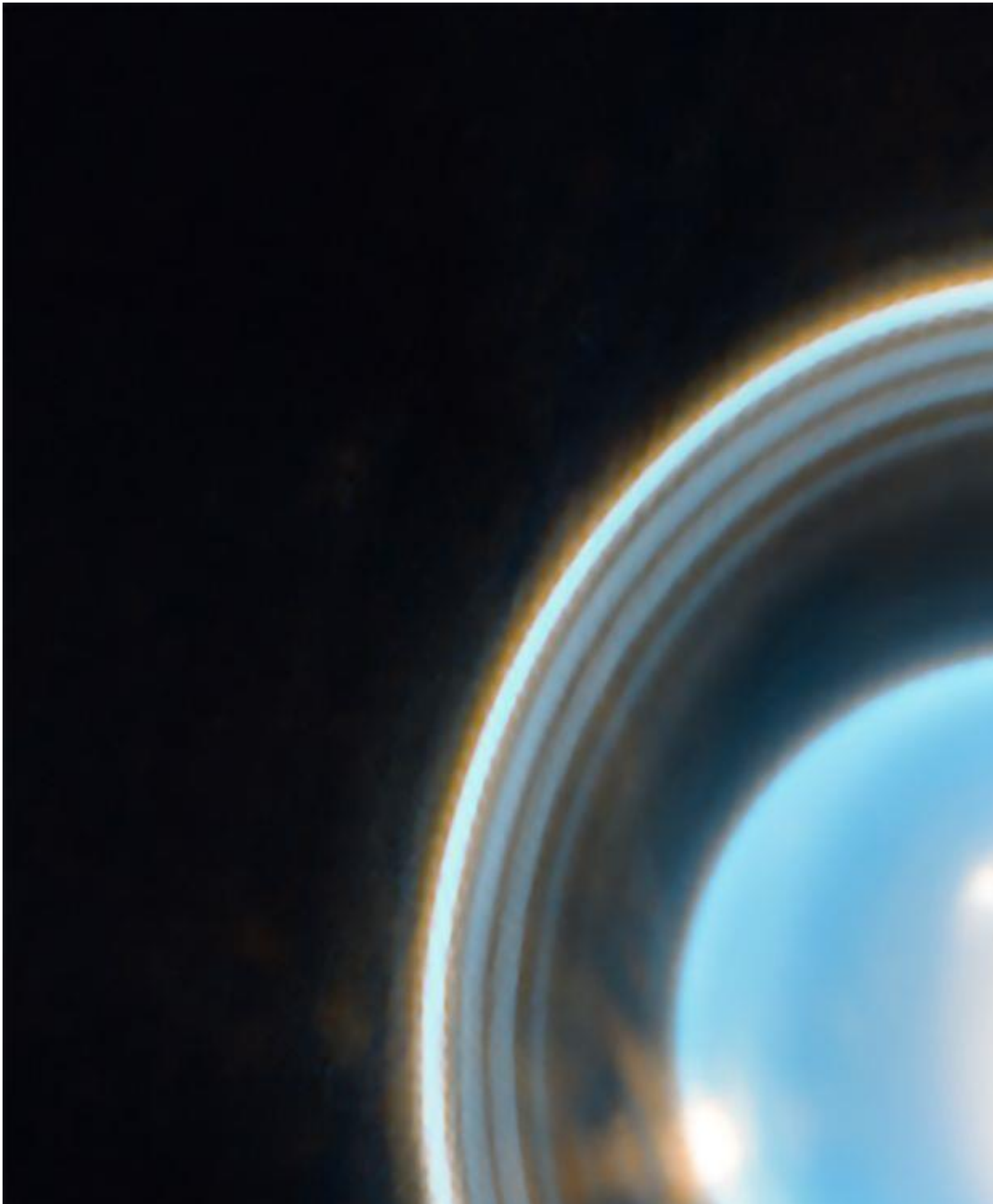
The telescope's Near-Infrared Camera and Mid-Infrared Instrument captured the composite image.

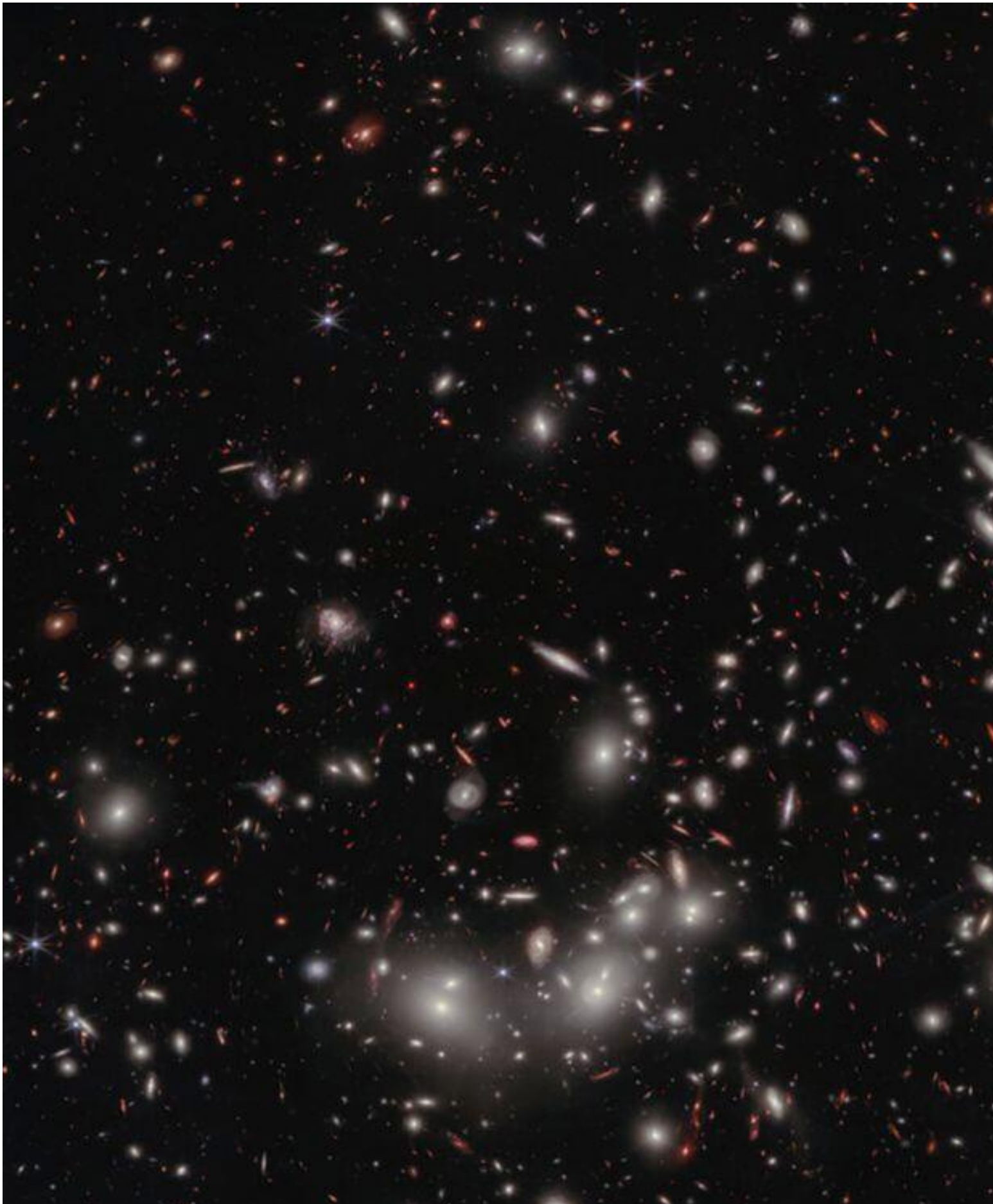
Arp 220 is located 250 million light-years away in the Serpens constellation, and it's the brightest of the three galactic mergers closest to Earth.

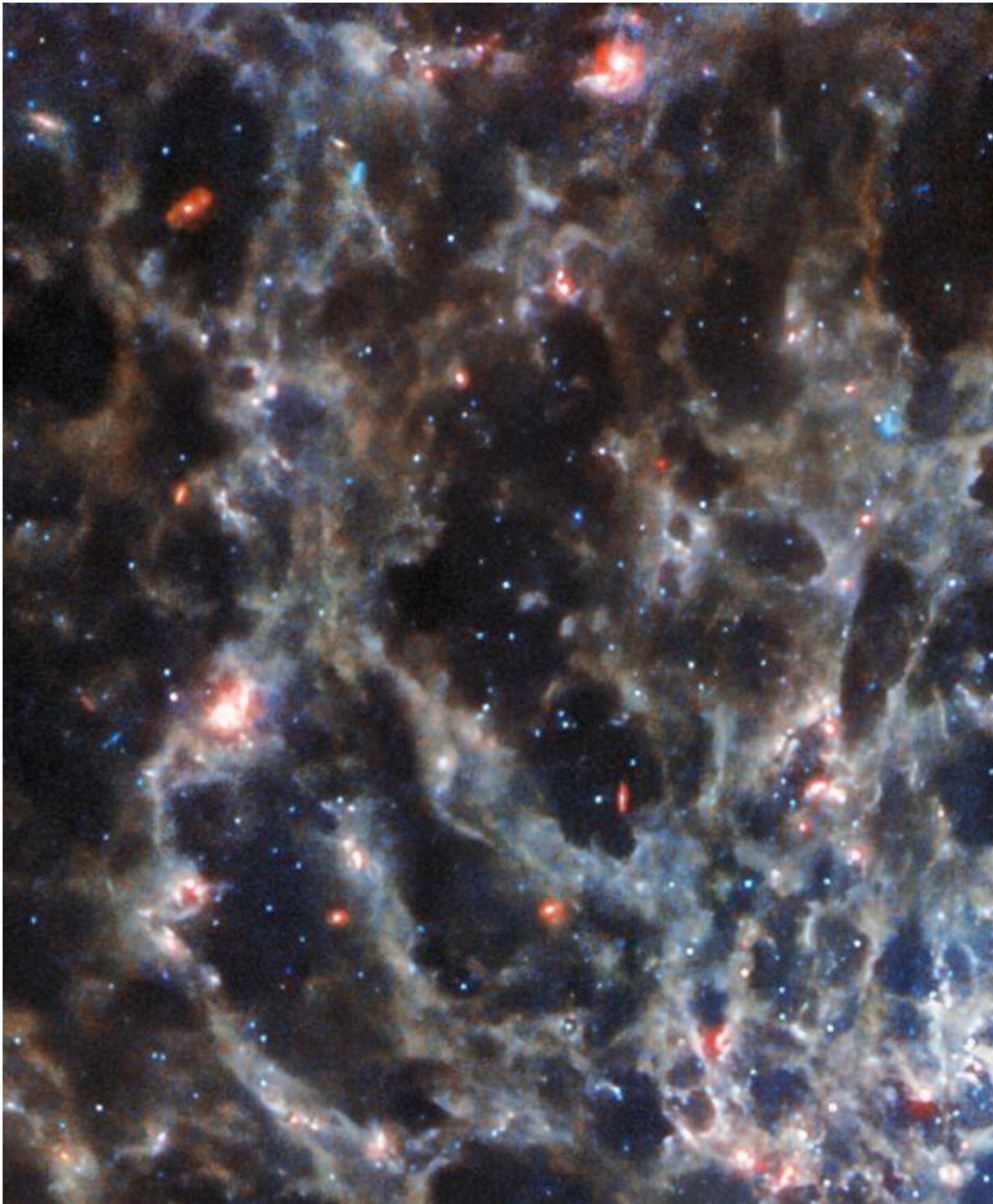
These two galaxies began colliding about 700 million years ago, and as the gas and dust combined, a tremendous flare of star birth began.

There are around 200 massive star clusters contained in a dusty region that stretches 5,000 light-years across, which is about 5% of the Milky Way's diameter. Yet there is enough gas in this small region, astronomically speaking, to replace all of the gas in the entire Milky Way.









JWST spectrometer refines redshifts of distant galaxies
18 Apr 2023

Before lift-off The NIRSpec instrument being tested on the ground prior to the launch of the JWST.(Courtesy:NASA/Chris Gunn)

[3]The NIRSpec instrument on the James Webb Space Telescope (JWST) has revealed that a far away galaxy previously thought to be at a record-breaking redshift of 16.4 is actually much closer to Earth. The study has also confirmed that some other objects observed by JWST are among the most distant galaxies ever seen.

Cosmological redshift is a measure of how much a galaxy's light has been stretched to longer, redder wavelengths by the expansion of the universe. The higher the redshift, the more time that light from a

[3] https://physicsworld.com/a/jwst-spectrometer-refines-redshifts-of-distant-galaxies/

galaxy must have spent moving through the expanding cosmos. This means that we see high redshift objects as they appeared a very long time ago – and that the objects are very far away.

Astronomers are very keen on studying high-redshift galaxies because they provide a window into the early universe. Indeed, recent observations support an emerging picture that galaxies in the early universe were more massive, more developed and more luminous than had been previously predicted.

Several faint galaxies

In the summer of 2022, the JWST's first deep surveys of the distant universe turned up several faint galaxies that were estimated to be the highest redshift galaxies ever seen.

One object is called Maisie's Galaxy that was discovered in the JWST data by a team led by Steve Finkelstein of the University of Texas at Austin. The galaxy was initially thought to be at redshift 14.3, which would have placed it just 280 million years after the Big Bang. Another candidate, CEERS-93316, found by a team led by Callum Donnan of the University of Edinburgh, appeared to be at a redshift of 16.4, which equates to just 250 million years after the Big Bang.

For comparison, the most distant confirmed galaxy known prior to the launch of the JWST was Gn-z11, which has a redshift of 11.6.

Revised redshifts

These early JWST measurements were made using a photometric technique, which gauges the overall redness of a galaxy. While this technique can be used on faint, distant objects, it can be affected by the presence of dust and is not as accurate as measuring the shifts of individual spectral lines. Now, a team of astronomers have used JWST's Near-Infrared Spectrometer (NIRSpec) to observe the galaxies and have refined the redshift estimates – with mixed results.

"Unfortunately, the redshift 16.4 candidate [CEERS-93316] turned out to be low redshift," says Donnan, who is a member of the team led by Pablo Arrabal Haro of NOIRLab in Arizona. Because the NIRSpec data were immediately made public with no proprietary time for the scientists who proposed

the observations, Haro's team had to write their paper in less than three days to avoid being beaten to the punch.

Rather than being at 16.4, CEERS-93316 was found to be a dusty galaxy at a redshift of 4.9, meaning that we see it as it existed 12.5 billion years ago. Donnan's team had previously thought they had a strong case for a record-breaking redshift, particularly as the galaxy displayed strong blue and ultraviolet emission in its rest frame (as it appears with the redshift removed).

However, the combination of very strong emission lines coupled with the fact that one of those lines, of the hydrogen-alpha wavelength, was in a position where three of NIRSpec's filters overlap so that the emission line contributes to all three, erroneously gave the impression that CEERS-93316 was an intrinsically luminous galaxy at a much higher redshift.

Maisie's Galaxy

There was better news in the redshift stakes for Maisie's Galaxy, which was revealed to be at a redshift of 11.4. This is still a very high redshift and indicates a galaxy that is dust-free. The galaxy also has a relatively high star-formation rate and a total stellar mass of 250 million times the mass of the Sun. This mass had grown over a period of 30–120 million years prior to the time we see Maisie's Galaxy.

A further eight galaxies have now also been shown by NIRSpec to have redshifts greater than 10. The current record holder is JADES-GS-z13-0, which has a spectroscopically confirmed redshift of 13.2 and which we see as it existed just 350 million years after the Big Bang.

Donnan is still hopeful that JWST will be able to discover galaxies with spectroscopic redshifts greater than 14. "It's possible, especially in deeper imaging," he tells *Physics World*.

Dust production

Not that a well-studied galaxy at a redshift of 4.9 is anything to be sniffed at. Studying the properties of galaxies that existed when the universe was just over a billion years old is crucial in understanding

how galaxies have developed in terms of their star formation. This can be inferred from the amount of dust that successive generations of stars produce – the same dust that causes CEERS-93316 to appear redder.

“We need to do a more detailed analysis of the properties of CEERS-93316, but it appears to be dusty,” says Donnan. “We need to look into its star-formation history if we want to understand how it came to be.”

Meanwhile, further observations are planned for the very high redshift galaxies such as Maisie’s Galaxy according to Finkelstein, who is also involved with the NIRSpec study.

Deeper spectroscopy

“The next step is definitely deeper spectroscopy, to probe exactly what is causing [Maisie’s Galaxy] to be so blue,” he says, referring to is its rest-frame colour. The leading theory is that early galaxies such as Maisie’s Galaxy had a higher proportion of luminous, blue, massive stars compared to galaxies today. Observations using one of the Keck 10-metre telescopes in Hawaii are already underway, and Finkelstein hopes to follow up with JWST in the future.

“We’ll be looking for weaker rest-UV emission line features, which are diagnostics for things including the presence of very massive stars and also how intense the starlight is from the stars we see,” says Finkelstein.

Ultimately, the findings are a reminder of the need for the spectroscopic confirmation of galaxy redshifts and that until such measurements are made, we should take claims of record-breaking photometric redshifts with caution.

The research is described in a prerint on *arXiv*.

Webb space telescope shows off ‘amazing’ power by spotting compact galaxy

The galaxy existed about 510 million years after the Big Bang event marking the universe's origin

April 16, 2023 01:08 pm | Updated 06:00 pm IST

REUTERS

[4]Using first-of-their-kind observations from the James Webb Space Telescope, researchers detected a unique galaxy (inset) Ð highly compact but with star formation still at a rate similar to our much-larger Milky Way Ð existing about 13.3 billion years ago that could help astronomers learn more about galaxies that were present relatively shortly after the Big Bang. | Photo Credit: Reuters

The detection of a highly compact galaxy that formed relatively soon after the Big Bang and displayed an impressive rate of star formation is the latest example of how the James Webb Space Telescope is reshaping our understanding of the early universe.

Scientists said the galaxy, dating to 13.3 billion years ago, has a diameter of approximately 100 light-years - about 1,000 times smaller than the Milky Way - but forms new stars at a rate very similar to

[4] https://www.thehindu.com/sci-tech/science/webb-space-telescope-shows-off-amazing-power-by-spotting-compact-galaxy/article66743465.ece

that of our much-larger present-day galaxy. A light-year is the distance light travels in a year, 5.9 trillion miles (9.5 trillion km).

It existed about 510 million years after the Big Bang event marking the universe's origin. The universe at the time was less than 4% of its current age.

The discovery is another example of how observations by Webb, which was launched in 2021 and began collecting data last year, are transforming our knowledge of the nature of the early universe. The orbiting infrared observatory was designed to be far more sensitive than its Hubble Space Telescope predecessor.

"Our current understanding of galaxy formation in the early universe doesn't predict that we would see this many galaxies at such early times in the universe's life, so this is really exciting," said Hayley Williams, a University of Minnesota doctoral student in astrophysics and lead author of the study published this week in the journal *Science*.

Also Read | Closest known black hole to Earth spotted by astronomers

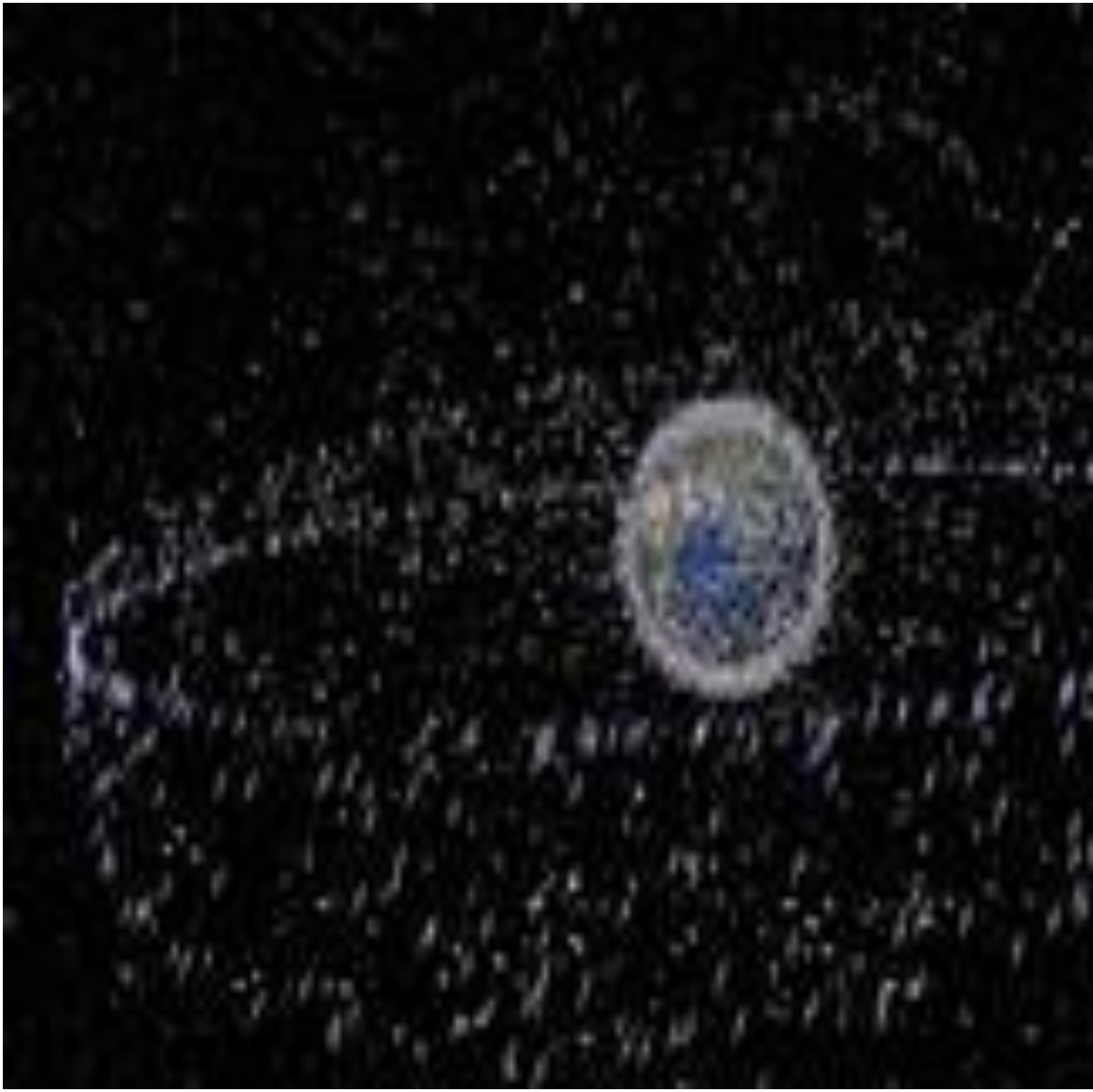
"As we observe more and more of these distant galaxies, we'll be able to put together a more complete picture of how the first galaxies in our universe came to be," Williams added. "We are seeing that the galaxies that existed in the early universe are very different from the galaxies that exist today and that our usual assumptions about galaxy properties may not apply in the early universe."

Webb looks at the universe mainly in the infrared, while Hubble has examined it primarily at optical and ultraviolet wavelengths. Webb possesses a much bigger light-collecting area, letting it look at greater distances, thus farther back into time, than Hubble.

"JWST's (James Webb Space Telescope's) reach into the first billion years of the universe has been amazing, and has given astronomers a lot to consider and try to understand about when and how many galaxies formed," University of Minnesota astronomy professor and study co-author Patrick Kelly said.

What is being observed in the newly described galaxy, Kelly said, might be a "globular cluster" - a tightly bound collection of tens of thousands to millions of stars - in the process of forming.

This galaxy, Kelly said, is "absolutely tiny" in relative terms.



Astronomers sound alarm about light pollution from satellites

"Nonetheless, we found that it was forming about two stars each year, which is similar to the rate at which the Milky Way is forming stars," Kelly added.

The researchers examined this galaxy's chemical composition, finding, for example, an oxygen abundance much lower than typically found in present-day galaxies - and for good reason. Oxygen and other elements heavier than hydrogen and helium are forged in the thermonuclear furnaces at the interior of stars and then blown into space when stars explode at the end of their life cycles.

Because so many fewer stars had lived and died at that time in the universe, such heavier elements were more scarce.

Observing this galaxy was aided by a phenomenon called "gravitational lensing" that occurs when an immense amount of matter, like a grouping of galaxies, creates a gravitational field that distorts and magnifies light traveling from distant galaxies located behind it but in the same line of sight.

"The combined power of the James Webb Space Telescope and the galaxy's magnification due to gravitational lensing allows us to study this galaxy in detail," Williams said.

James Webb Space Telescope keeps finding galaxies that shouldn’t exist, scientist warns

Six of the earliest and most massive galaxies that Nasa’s breakthrough telescope has seen so far appear to be bigger and more mature than they should be

Andrew Griffin

1 day ago

Comments

Close

Moment ESA rocket launches for mission to Jupiter's moons

[5]The James Webb Space Telescope keeps finding galaxies that shouldn’t exist, a scientist has warned.

[5] https://www.independent.co.uk/space/james-webb-telescope-space-galaxies-b2322370.html

Six of the earliest and most massive galaxies that Nasa's breakthrough telescope has seen so far appear to be bigger and more mature than they should be given where they are in the universe, researchers have warned.

The new findings build on previous research where scientists reported that despite coming from the very beginnings of the universe, the galaxies were as mature as our own Milky Way.

Now a new paper has appeared to confirm those findings, by "stress testing" the galaxies to better und

"If the masses are right, then we are in uncharted territory," said Mike Boylan-Kolchin, from the University.of Texas at Austin, and the author of a new paper examining the unsual galaxies. "We'll require something very new about galaxy formation or a modification to cosmology. One of the most extreme possibilities is that the universe was expanding faster shortly after the Big Bang than we predict, which might require new forces and particles."

Professor Boylan-Kolchin's paper, 'Stress testing ΛCDM with high-redshift galaxy candidates', has been published in *Nature Astronomy* this week.

It suggests that the information from the JWST proposes a profound dilemma for scientists. The data indicates that there mighttbe somehitn wrong with the dark energy and cold dark matter paradigm, or ΛCDM, that has been guiding cosmology for decades.

Usually, galaxies convert around 10 per cent of their gas into stars. But the newly discovered galaxies would have to be converting almost the entirety of it into stars.

That is theoretically possible. But it is a departure from what scientists would ever have expected.

Further observation of the galaxies should better clarify their ages and masses. It might show that the observations are incorrect: that supermassive black holes at their centre are heating the galaxies up, so they look more massive than they are, or that they are actually from a later time than expected but look older because of imaging problems.

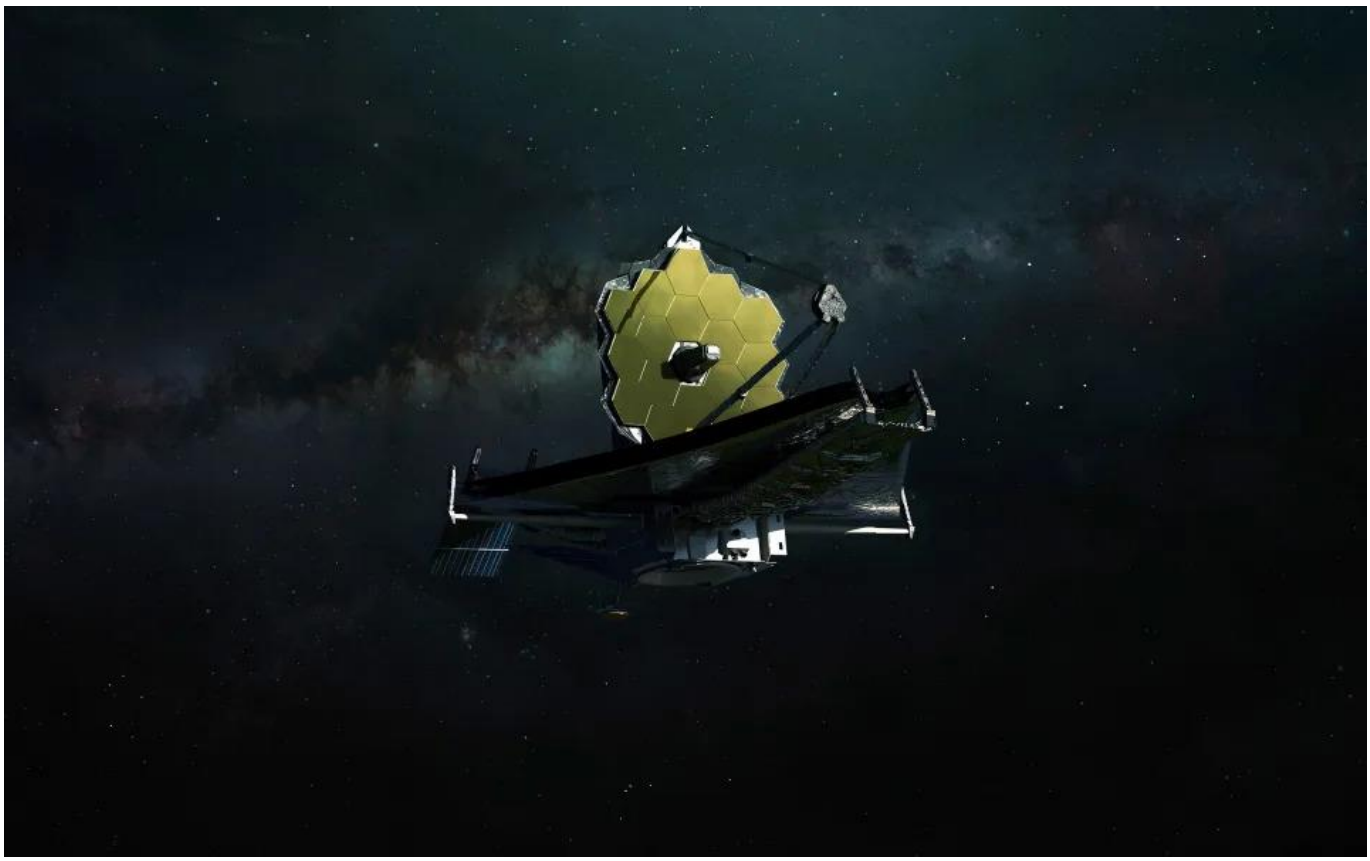
But if they are confirmed, then astronomers may have to change their understanding of the cosmos and how galaxies grow, to adjust their model to account for the unusually large and mature galaxies.

James Webb discoveries are challenging what we know about the universe's evolution

418

Joshua Hawkins

Sat, April 15, 2023 at 10:20 PM CDT·2 min read

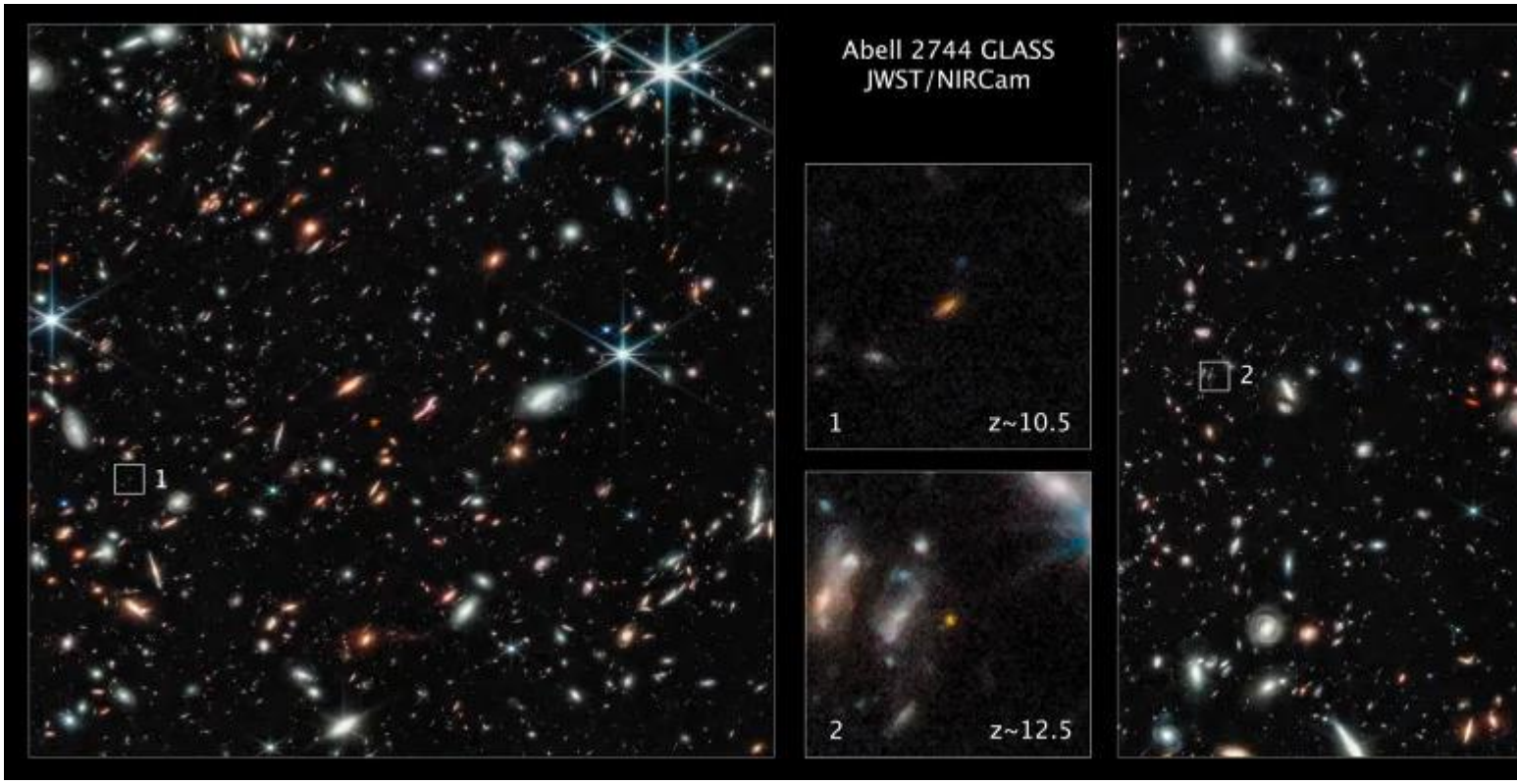


[6]Everything we know about the evolution of the early universe is currently being challenged. Multiple galaxies discovered by the James Webb Space Telescope do not match up with the standard model of cosmology that astronomers currently believe in.

According to a new study published in *Nature Astronomy*, six of the earliest galaxies that Webb has observed contradict how astronomers currently look at the evolution of the early universe. The author of the study, Mike Boylan-Kolchin, says that these galaxies are too big to fit our current models.

When we look at the evolution of the early universe, we often expect to see much smaller galaxies. However, out of the six that Boylan-Kolchin focuses on, all of them are much more massive than scientists previously believed possible within that time. Astronomers estimate each of the galaxies to be from 500 to 700 million years ago.

[6] https://www.yahoo.com/entertainment/james-webb-discoveries-challenging-know-032000164.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAAGZf6QzbiFA8lQ4hiCpLZzs__ZxNNymxl4jC0d1AP6gIYJlV6z_JrlLydz7uZP2tKIQ71iN-ezzbv_fLP-al2Gg5sysArjQrtTJ1W8DBnqzqgZPOUc4guJMuw-3HhIYufcesqgdrFmPLR2zpsXGvIH9u3NC2VDWuq-k4UWGJavl



webb mysteries of the early universe

However, each of them measures over 10 billion times as massive as our Sun. In fact, one of them even appears to be much more massive than the Milky Way, although our galaxy has had billions of more years to evolve and shed its ancient core. These discoveries, Boylan-Kolchin says, could completely change how we address the evolution of the early universe.

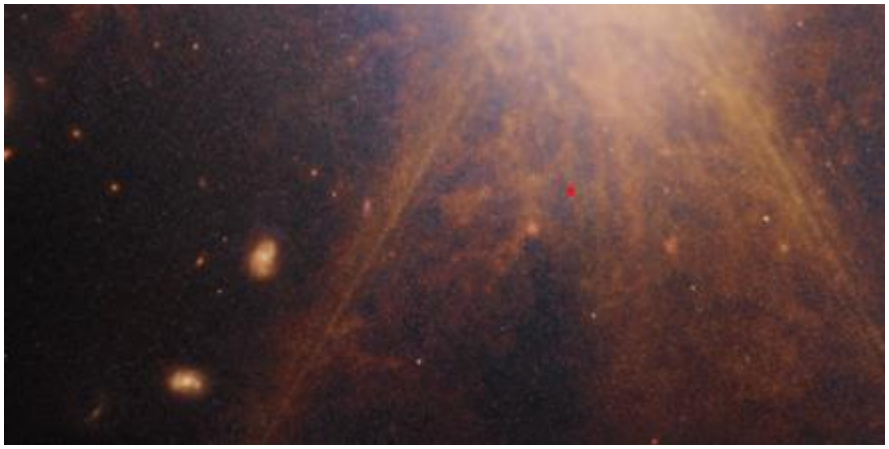
Boylan-Kolchin says that we're in "uncharted territory" if the masses scientists estimate turn out to be correct. This discovery could require that we look at unknown forces and particles to try to understand how the universe expanded so quickly to include such heavily evolved galaxies. It's also possible that we aren't looking back as far as we thought. We need more research to draw a final conclusion.

Of course, we always knew that James Webb was going to challenge things we thought we understood. The telescope is peering deeper into space and further back in time than we've

ever been able to before. It’s likely this is just one of many things that will challenge our current understanding of the evolution of the early universe.

But every challenge that comes forward allows us to look closer at what we know and don’t know. It allows us to clean up lines that have remained blurred for decades. Lines that we need to more clearly trace if we want to truly understand it all.

Webb Captures the Spectacular Galactic Merger Arp 220



[7]A stunning smash-up of two spiral galaxies shines in infrared with the light of more than a trillion suns. Collectively called Arp 220, the colliding galaxies ignited a tremendous burst of star birth. Each of the combining galactic cores is encircled by a rotating, star-forming ring blasting out the glaring light that Webb captured in infrared. This brilliant light creates a prominent, spiked, starburst feature.

Credits: NASA, ESA, CSA, STScI, Alyssa Pagan (STScI)

Download the full-resolution image from the Space Telescope Science Institute.

Shining like a brilliant beacon amidst a sea of galaxies, Arp 220 lights up the night sky in this view from NASA's James Webb Space Telescope. Actually two spiral galaxies in the process of merging, Arp 220 glows brightest in infrared light, making it an ideal target for Webb. It is an ultra-luminous infrared galaxy (ULIRG) with a luminosity of more than a trillion suns. In comparison, our Milky Way galaxy has a much more modest luminosity of about ten billion suns.

Located 250 million light-years away in the constellation of Serpens, the Serpent, Arp 220 is the 220th object in Halton Arp's *Atlas of Peculiar Galaxies*. It is the nearest ULIRG and the brightest of the three galactic mergers closest to Earth.

[7] https://www.nasa.gov/feature/goddard/2023/webb-captures-the-spectacular-galactic-merger-arp-220

The collision of the two spiral galaxies began about 700 million years ago. It sparked an enormous burst of star formation. About 200 huge star clusters reside in a packed, dusty region about 5,000 light-years across (about 5 percent of the Milky Way's diameter). The amount of gas in this tiny region is equal to all of the gas in the entire Milky Way galaxy.

Previous radio telescope observations revealed about 100 supernova remnants in an area of less than 500 light-years. NASA's Hubble Space Telescope uncovered the cores of the parent galaxies 1,200 light-years apart. Each of the cores has a rotating, star-forming ring blasting out the dazzling infrared light so apparent in this Webb view. This glaring light creates diffraction spikes — the starburst feature that dominates this image.

On the outskirts of this merger, Webb reveals faint tidal tails, or material drawn off the galaxies by gravity, represented in blue — evidence of the galactic dance that is occurring. Organic material represented in reddish-orange appears in streams and filaments across Arp 220.

Webb viewed Arp 220 with its Near-Infrared Camera (NIRCam) and Mid-Infrared Instrument (MIRI).

The James Webb Space Telescope is the world's premier space science observatory. Webb will solve mysteries in our solar system, look beyond to distant worlds around other stars, and probe the mysterious structures and origins of our universe and our place in it. Webb is an international program led by NASA with its partners, ESA (European Space Agency) and the Canadian Space Agency.

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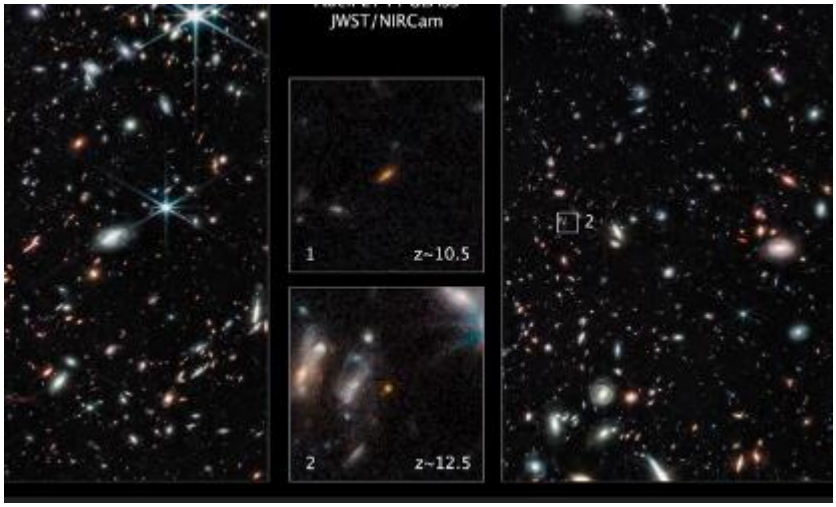
One of the oldest galaxies ever was found with James Webb Space Telescope

[8]The observation is among the first of a distant galaxy using NASA's James Webb Space Telescope since it was launched in December 2021.

By JERUSALEM POST STAFF



[8] https://www.jpost.com/science/article-739326

Published: APRIL 16, 2023 02:38

This illustration depicts NASA's James Webb Space Telescope – the largest, most powerful, and most complex space science telescope ever built – fully unfolded in space. The telescope's first full-color images and spectroscopic data will demonstrate Webb at its full power, ready to begin its mission

(photo credit: NASA/Adriana Manrique Gutierrez)

The James Webb Telescope has discovered a galaxy from 13 billion years ago.

The finding, published Thursday in the peer-reviewed journal *Science*, is among the smallest ever discovered at this distance—around 500 million years after the Big Bang. Astronomers from University of Minnesota who made the discovery say it could lead to more information about galaxies that were present shortly after the Universe came into existence.

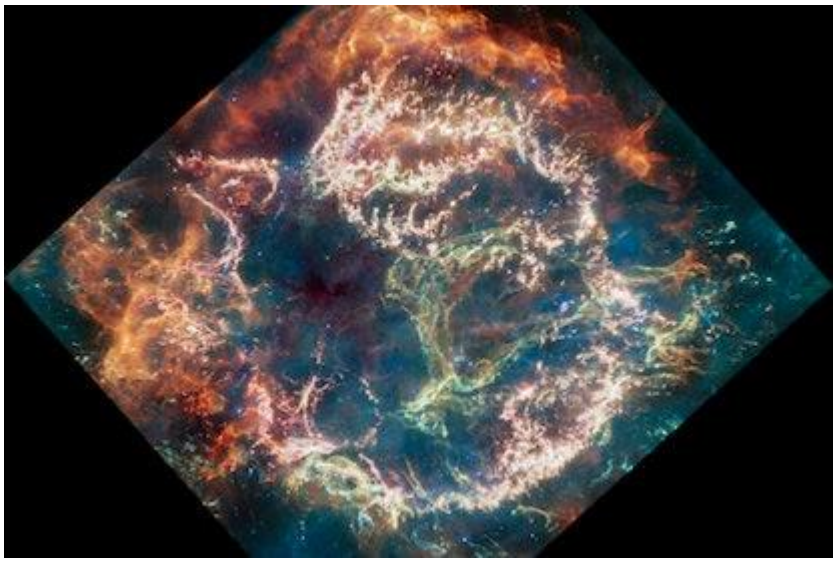
The observation is among the first of a distant galaxy using the James Webb Space Telescope.

This JWST Photo Of The Youngest Known Exploding Star In Our Galaxy Is Incredible

[9]The incredible James Webb Space Telescope (JWST) is back with another wow-worthy picture of Cassiopeia A.

by **Devan McGuinness**

April 18, 2023



NASA, ESA, CSA, D. Milisavljevic (Purdue), T. Temim (Princeton), I. De Looze (Ghent University). Image Processing: J. DePasquale (STScI).

The incredible James Webb Space Telescope (JWST) is back with another astounding image that captured a dramatic — and somewhat rare — space event. As a result, the youngest known star to explode in our galaxy, and what was left behind, can now be studied in these jaw-dropping images.

NASA released the new image in early April, and it shows an incredible picture of Cassiopeia A (Cas A), a supernova remnant that was created 340 years ago, from the perspective here on Earth. It's the youngest known remnant from an exploding star, and scientists are excited to study it to learn more about why and how these explosions happen.

"Cas A represents our best opportunity to look at the debris field of an exploded star and run a kind of stellar autopsy to understand what type of star was there beforehand and how that star exploded," Danny Milisavljevic of Purdue

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[9] https://www.fatherly.com/news/this-jwst-pic-shows-the-youngest-known-exploding-star-in-our-galaxy

University in West Lafayette, Indiana, principal investigator of the Webb program that captured these observations, said, according to NASA.

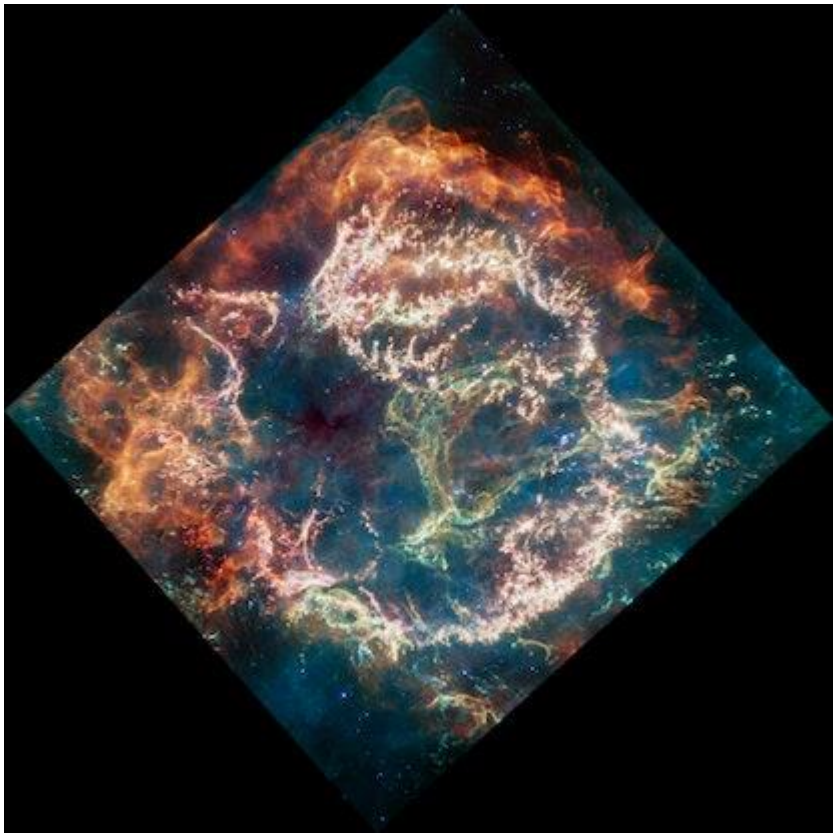
“Compared to previous infrared images, we see the incredible detail that we haven't been able to access before,” added Tea Temim of Princeton University in Princeton, New Jersey, a co-investigator on the program.

Can you explain what we see in these photos like we’re 5 years old?

This supernova remnant is located approximately 11,000 light-years from Earth in the Cassiopeia constellation, and its full length is 10 light-years. Using the mid-infrared camera from JWST, we can see so much detail — and the scientists are still trying to sort through everything they’re looking at.

The colors in the image alone hold a lot of information. The outer part of the remnant, seen as orange and red curtains of material, shows where ejected material from the exploded star is crashing into surrounding gas and dust.

Inside the remnant, mottled filaments of bright pink represent material from the star itself that is shining due to various heavy elements and dust. There are also fainter wisps of material near the center.



NASA, ESA, CSA, D. Milisavljevic (Purdue), T. Temim (Princeton), I. De Looze (Ghent University). Image Processing: J. DePasquale (STScI).

One of the questions scientists hope to answer with Cas A is where cosmic dust comes from. They've been able to look at younger galaxies in the universe that have lots of dust, but they're still trying to formulate where all the dust comes from.

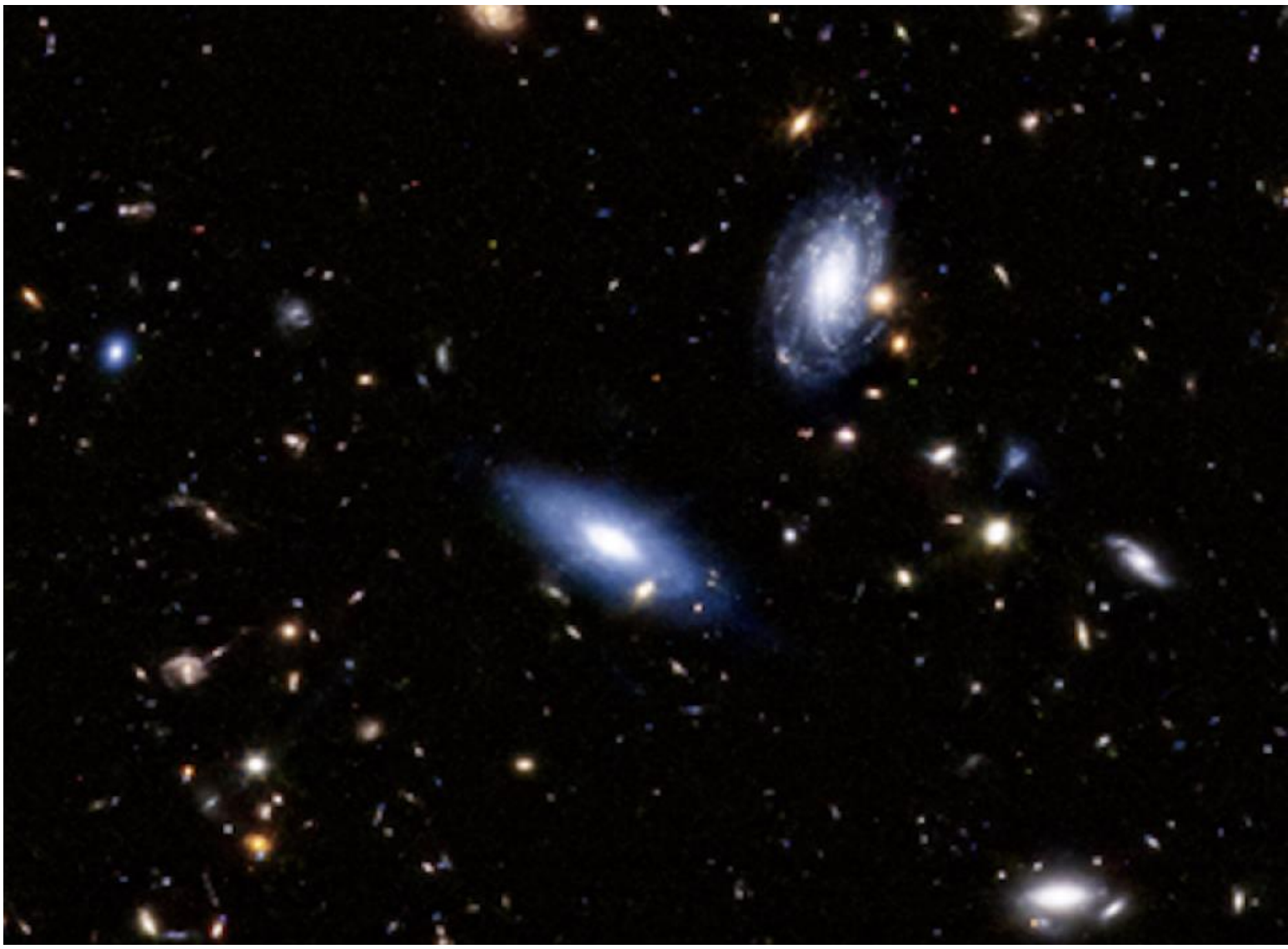
"It's difficult to explain the origins of this dust without invoking supernovae, which spew large quantities of heavy elements (the building blocks of dust) across space," NASA notes.

NASA notes that supernovae, like the one that created Cas A, are key for life as we know it because they spread elements like iron and calcium across space — which are necessary for stars, planets, and, well, people.

Webb telescope flexes its muscle with this deep, deep view into space

Galaxies, galaxies, and more galaxies.

By Mark Kaufman on April 15, 2023



[10]The James Webb Space Telescope peered at this small patch of sky for around 20 hours to capture rich detail of extremely distant galaxies. Credit: NASA / ESA / CSA / STScI / Christina Williams (NSF's NOIRLab) / S. Tacchella (Cambridge) / Michael Maseda (UW-Madison) // IMAGE PROCESSING: Joseph DePasquale (STScI)

In the images above and below, pretty much everything you see is a galaxy.

And this is just a tiny patch of sky viewed by the James Webb Space Telescope.

Whether a stunning spiral or more distant fuzzy point of light, every galaxy is full of intrigue. And each is "surely filled with billions and billions of planets," tweeted(opens in a new tab) astronomer Paul Byrne.

This scene comes from a celebrated part of the cosmos called the "Hubble Deep Field." It's where the legendary, school bus-sized Hubble telescope peered at a patch of sky(opens in a new tab) just 1/13th the diameter of the moon as seen from Earth, showing the denizens of our planet an eye-opening cosmic vista. Now astronomers have turned the most powerful space telescope ever built, Webb, at the deep field. What they saw demonstrates the instrument's unprecedented power and ability to capture bounties of cosmic insight.

It took Hubble over 11 days to capture its historic deep field, located in the constellation Ursa Major close to the handle of the Big Dipper, in such high resolution. "In 2022, Webb took only about 20 hours to observe that same field in high-resolution," said NASA(opens in a new tab).

Scientists have a good reason for returning to this deeply investigated patch of space. They want to know how the first galaxies formed billions of years ago. "We don't exactly know how galaxies became how they are today," NASA explained(opens in a new tab). "With its sensitivity, Webb is helping astronomers hunt for the first galaxies and better understand star formation and other galactic properties in the early universe."

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[10] https://mashable.com/article/james-webb-space-telescope-deep-field

To view these early galaxies, astronomers used the Webb telescope's main imaging camera, the Near Infrared Camera, or NIRCam, which can detect some of the faintest light in the cosmos. The specialized instrument allows scientists to tease out where new stars are being created in these distant galaxies, specifically by seeing "hot, ionized gas." Many newly formed stars release intense radiation that excites the abundant hydrogen atoms in surrounding clouds of gas, offering proof of star formation.

The detailed view of these distant cosmos, taken under a day of observation(opens in a new tab), are also just simply remarkable.

"I think that seeing how beautiful the images are and how high quality they ended up being was definitely a high point."

"I think that seeing how beautiful the images are and how high quality they ended up being was definitely a high point," Christina Williams, an astronomer at the National Science Foundation's NOIRLab, said in a statement(opens in a new tab). "We calculated that we would be able to do things like this, but it was different to see it and have the real data in practice."

James Webb Space Telescope Captures Youngest Supernova Remnant in the Milky Way

Published on:April 17, 2023

A stunning image of a star's remains.

[11]The James Webb Space Telescope captured a stunning image of Cassiopeia A, which is the youngest known remnant of a massive star that exploded about 340 years ago. The picture provides scientists the opportunity to find out more about how such supernovae occur.
Photo Credit: NASA

Dissecting the Image

Cassiopeia A spans about 10 light-years and is located 11,000 light-years away. It is a prototypical supernova remnant that has been widely studied in the past. Thanks to James Webb Space Telescope's multi-wavelength observations, scientists have now been provided a more comprehensive understanding of the remnant.

As Danny Milisavljevic, the principal investigator of the Webb program that captured these observations, said in a statement, "Cas A represents our best opportunity to look at the debris field of an exploded star and run a kind of stellar autopsy to understand what type of star was there beforehand and how that star exploded."

The image features many striking colors that the research team is beginning to investigate. On the top and left of the image lie curtains of material that appear orange and red due to emission from warm dust. This marks where ejected material from the exploded star meets its surrounding gas and dust.

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[11] https://www.tomorrowsworldtoday.com/2023/04/17/james-webb-space-telescope-captures-youngest-supernova-remnant-in-the-milky-way/

The clumps and knots of pink depict the material from the star itself, which includes a mix of oxygen, argon, neon, dust emission, and more. Scientists are currently looking into these sources of emission. The green loop also remains a mystery to scientists. Nicknamed the Green Monster in honor of Fenway Park in Boston, the loop is dotted with mini bubbles that scientists can not yet explain.

Photo Credit: NASA

For many, this image sparks awe in the beauty and mystery of space. But, for a select few, the image will guide years of research. As Milisavljevic noted, “By understanding the process of exploding stars, we’re reading our own origin story. I’m going to spend the rest of my career trying to understand what’s in this data set.”

What is a Supernova?

A supernova like Cassiopeia A is what occurs after a star has reached the end of its life and explodes in a brilliant burst of light. Supernovae can briefly radiate more energy than our sun will in its entire lifetime and are the primary source of heavy elements in the universe. Supernovae can be classified as either Type I or Type II. In a Type I supernova, a star accumulates matter from a nearby neighbor until a runaway nuclear reaction ignites. They typically originate from white dwarf stars; as the gas of the companion star accumulates on the white dwarf, it eventually sets off a nuclear reaction that leads to a supernova outburst. In a Type II supernova, a star runs out of nuclear fuel and collapses under its own gravity. Once a star’s core surpasses a certain mass, it begins to implode. Eventually, the implosion bounces back off the core which expels the stellar material into space and forms the supernova. Cassiopeia A was a Type II supernova. It originated from the collapse of a helium core of a red supergiant that had lost most of its hydrogen envelope before exploding

NASA's James Webb Space Telescope revealing new details of the early universe

APRIL 9, 2023 / 7:49 PM / CBS NEWS

Carina Nebula NASA, ESA, CSA, AND STSCI

[12]The earliest-known galaxy ever found was recently uncovered and confirmed by NASA's James Webb Space Telescope.

But astrophysicist Brant Robertson, who helped make the discovery as part of the JADES team, said that he doesn't expect the current record will hold for long. The telescope is so powerful that it's expected to find even earlier galaxies, he told 60 Minutes correspondent Scott Pelley.

"If you spend enough time, you could probably find any galaxy that ever formed in the universe," Robertson said. "It's really that powerful."

The telescope was launched on Christmas day in 2021 and is on a mission to find light from the first stars and galaxies. Since its successful deployment, it's captured stunning images of the moments before a star's death and galaxies dating back just a few hundred million years after the Big Bang.

Robertson, of the University of California, Santa Cruz, helps lead Webb's most ambitious mission, JADES, the JWST Advanced Deep Extragalactic Survey. That survey led to the discovery of a galaxy more than 33 billion light years away. It formed 320 million years after the Big Bang.

So far, Robertson's team has discovered two galaxies from the time when the universe was just 2 percent of its current age. One of them is forming stars at around the same rate as the Milky Way, even though it's 100 times less massive.

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[12] https://www.cbsnews.com/news/nasa-webb-space-telescope-mysteries-universe-60-minutes-2023-04-09/

"So it really is like a hummingbird, the heartbeat of this galaxy is racing," Robertson said.

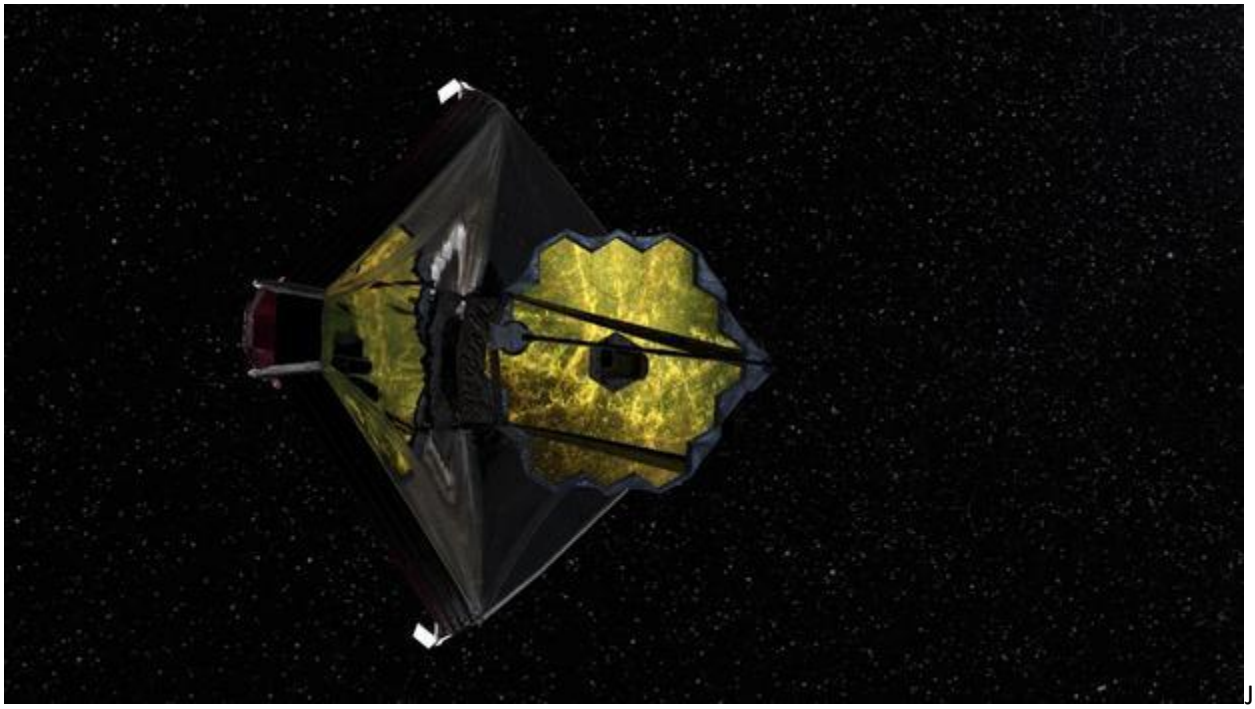
Astronomers and astrophysicists analyze the spectrum of light captured by Webb. They can measure how fast the galaxy forms stars, estimate the number of stars in the galaxy and much more.

Astrophysicist Erica Nelson of the University of Colorado, Boulder, is part of a team investigating what may be five giant galaxies that appear to have formed too big too quickly after the Big Bang.

"Either this is wrong or this is a huge discovery, and we think that it's a huge discovery," Nelson said.

More observations are needed, but Nelson says that, if confirmed, the discovery would break the theory of how the early universe formed.

"And that's the most exciting piece of this, of this telescope, of this remarkable instrument we put in space, is finding things that we didn't expect, that we can't explain," she said. "Because that means that we have to revise our understanding of the universe."



James Webb Space Telescope NASA, SKYWORKS DIGITAL, NORTHROP GRUMMAN, STSCI

Webb will make even more discoveries over the coming years. Matt Mountain, who manages Webb's operations for NASA as the president of AURA, believes the observatory may last up to 25 years. With Webb, Mountain says, "there is no empty sky."

"On almost every image we're taking now, we see galaxies everywhere. I mean, we took a simple picture of a planet in our own system, Neptune. You know, it was just this beautiful orb just sitting there and we saw some rings. In the background are galaxies again," Mountain said. "It tells us that our universe is filled with galaxies. We knew this theoretically, but when you go out to the night sky, we're used to saying, 'Well, look up at the night sky, we see those stars.' We can no longer say that. We now have to say, 'Look up at the night sky and there are galaxies everywhere.'"

Webb's primary mission is to reveal the "let there be light," moment when the stars and galaxies first ignited after the Big Bang. The powerful $10 billion telescope, 25 years in the making, is considered the successor to the 32-year-old Hubble.

Webb has captured a direct image of a planet located outside of our solar system. It's been used to get extremely detailed images of thousands of never-before-seen young stars in a region known as the Tarantula Nebula. The telescope has also shown previously unseen stars and intricate detail in towering clouds of gas known as the "Pillars of Creation."

Since Webb captures infrared light, which is invisible to the human eyes, Alyssa Pagan and Joe Depasquale follow a scientifically rigorous method of taking data from Webb and matching it with wavelengths people can see to make the awe-inspiring images released to the public. Pagan and Depasquale are among the first people in history to see the images of the cosmic discoveries captured by Webb.

"It is a great honor and it does blow your mind every time," Pagan said.

Some of the discoveries leave even the experts starstruck. Purdue University astronomer Dan Milisavljevic studies exploded stars, which were the furnaces that forged the first heavy elements from a cosmos of simple helium and hydrogen. Webb reveals unprecedented detail at the centers of these explosions, Milisavljevic said.

"Every time there's a supernova explosion, it's producing the raw materials for life: the iron in our blood, the calcium in our bones, the oxygen that we breathe," Milisavljevic said. "All that is being manufactured in supernova explosions."

Even as it's helping astronomers and astrophysicists learn more, the Webb telescope is a reminder of how much we do not know about the universe, Mountain said. For instance,

Mountain said, little is known about dark energy and dark matter, two elements believed to make up almost the entire universe.

"We are lucky if we even understand 4 percent of our universe today," Mountain said.

Sine waves

No Access Published Online: 29 August 2019

The complete life cycle of the universe is a complete one period sine wave: Negative to positive half cycle of sine wave represents active state whereas positive to negative half cycle represents the latent state of the universe

AIP Conference Proceedings 2142, 110029

(2019); https://doi.org/10.1063/1.5122489

Prasenjit Debnath[1,a)]

ABSTRACT

[13]We know that everything has a life cycle. All living things, non – living things, countries, world, astronomical bodies, solar system, galaxies, the universe everything has a life cycle. According to Fourier, any physical phenomena can be explained by a sine wave. Any arbitrary signal or physical

[13] https://aip.scitation.org/doi/abs/10.1063/1.5122489#:~:text=A%20sine%20wave%20is%20the,from%20the%20ba sic%20sine%20wave.5

phenomena is actually a combination of a dc (constant) part, a sin wave with fundamental time period and its harmonics. If we remove the harmonics from any arbitrary signal or physical phenomena, we will be left with only a sine wave of fundamental period. The sine wave of fundamental period possesses over 90% of the signal energy, thus, if we remove all harmonics, we actually do not lose much energy of the signal but we will get the basic shape of the signal or physical phenomena – a sine wave. A sine wave is the basic building block of all physical phenomena including the life cycle of everything from tiny living things to the universe. A sine wave is the ideal shape of any life cycle. Little deviation is allowed by nature to form other shapes from the basic sine wave. These deviation, although very little, can be termed as the effect of imaginary time that introduces unpredictability in the life cycle. The amount of deviation signifies the amount of unpredictability in the life cycle. The amount of unpredictability signifies the amount of imaginary time involved in life cycle. The amount of deviation (amount of harmonics) actually gives different shapes to the different life cycles. But if we do smoothing out the deviations by averaging them, we will be left with a sine wave – basic building block of the Universe.

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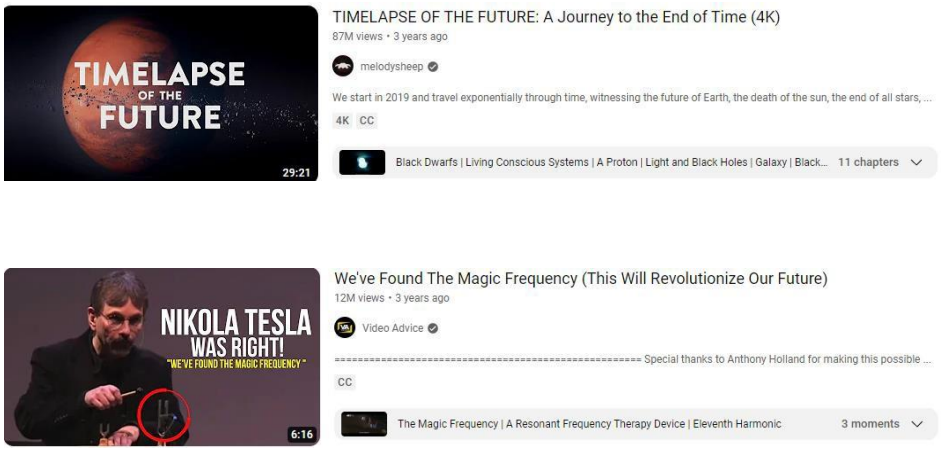

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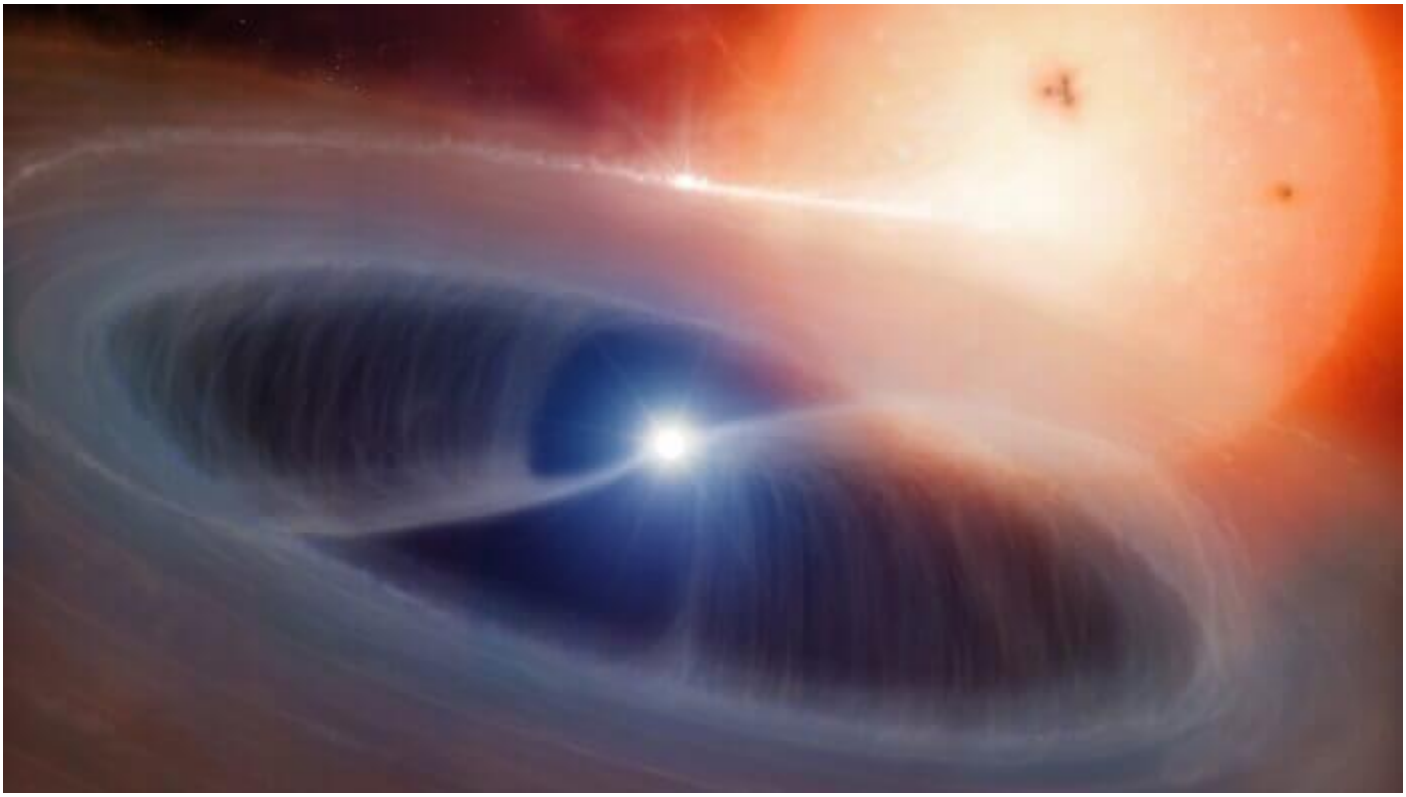
The Science of Sirius Mythology & Our Two Sun Solar System

By The Human Origin Project



[14]If you had a long lost brother or sister, would you try and find them? Of course they are a part of you.

The idea that earth has two suns seems outlandish at first. If you look at the sky, one sun rises during the day.

Why would anyone ever think that our solar system has two suns?

[14] https://humanoriginproject.com/sirius-mythology-two-sun-solar-system/

To begin, we know very little about how our own sun, or star, came to be. Current models suggest that the solar system formed in a nebular and gas cloud are just guesses.

Today, new research into star formation and dynamic galaxy systems are telling a new story. They reveal the likelihood of our sun being a binary star (having a twin or sibling).

Do we really have two suns?

It's a very big question. The binary-star hypothesis is building momentum. So, what is the binary star partner of our sun? Everything we know about our sun relates to our calendar. It measures the earth's orbit and other bodies in the solar system.
Calendars have their roots, all over the planet in ancient astronomy. Do these ancient societies understand the binary twin?

Sirius mythology was the focus of ancient folklore all around the world.

When we combine a modern and ancient view of the calendar system the evidence for a Sun-Sirius star partner becomes very apparent.

Could the Sirius star, not only be the brightest star in the sky but our second sun? Would it prove Sirius mythology to be real?

It's a mystery, that if solved, would be a critical piece of the human origin story.

Do binary stars exist?

Astronomy moved from an earth-centered universe to a solar system model very slowly. In 1532 Copernicus wrote his sun planet model, which he was too scared to publish. In 1632 Galileo was brave enough to do so. He was

persecuted by the church for his efforts. It then took two hundred years until 1835 for the solar system to be finally published again.

Since the 20th century, astronomers are moving towards a similar leap in human thought. It is a known fact that most stars exist in binary systems. Today astronomy is in the pursuit of the sibling of our own sun. It could be the biggest advancement of human thought, since the discovery of the solar system.
Our reality is that the sun is a tiny star in a sea of potential brothers and sisters. The dynamic universe theory explains our solar system is in a spinning spiral galaxy. Within this swirling corkscrew, stars have orbital siblings or binaries. They come from star nurseries that birth multiple star partners.

Research confirms binary star systems are more normal than single systems. Nasa states that 90% of stars begin with a binary partner.

It also *confirms* that our solar system was once a binary system. We have stopped short of saying what that partner is.
Let's now explore Sirius mythology alongside modern astronomy.

The Gregorian Calendar and Leap Year Paradox

We take it for granted the idea that the earth rotates the sun. It's the most influential force for life on earth. From day-night cycles to seasonal change, in modern society, it's easy to forget your deep connection to the sun.

Have you stopped to think about how your calendar tracks the movements of the solar system? The earth rotates on its axis for day and night. It also orbits around the sun for the year.

The Gregorian calendar is the most widely used system today. It states the date as Month, Day, and Year.

Years are split into twelve months. It's designed to measure the movement of the earth around the sun. Time is divided into day or the rotation of the earth on its axis. Months, or the lunar cycle. And years, the rotation of the earth around the sun.

The *problem* is that it doesn't quite work. Gregorian calendar years are an estimation. It uses leap years, as fudging method to stop the drift between solar and lunar years (there are actually 12.37 lunar months to a solar year). That means without leap years, the calendar falls out of sync with the day and month cycles. Even with leap years, our calendar loses a day over the space of 3200 years.
That may not seem like a lot. However, today research has recorded the Gregorian Calendar results in seasonal drift. It's proof the system does not work properly.
The Gregorian calendar nearly works. Is the reason that it is out of sync due to a missing factor? Is the missing piece really that our solar system revolves around another star. Otherwise known as a binary partner for the sun. That orbit would influence the orbit of planets within our own solar system. Exactly what calendars are supposed to measure.

A binary star or two sun system could fix the Gregorian calendar. As it turns out, ancient calendar systems are more accurate.

The dog star, Greek Calendar and Sirius mythology

The Gregorian Calendar system was introduced by Pope Gregory XIII in October 1582. Roman dating systems were being adjusted on previous attempts to line the solar and lunar years. The Gregorian calendar was designed to improve the Julian calendar that was losing one day every 128 years! That's very inaccurate.

If we explore ancient calendars, we find different methods of measuring the solar year. The Greeks used the Hellenic calendar. There was actually no one set Hellenic Calendar used across Classical Greece.

The calendars were different, but most used Sirius to calibrate the beginning of the year. That's the cycle that measures the rise of Sirius, also known as the Dog Star, known to the Greeks as Sothis. The cycle takes roughly 1460 days, depending on what calendar system you use. It's why Sirius mythology was built into Greek philosophy.

The Greek calendar didn't start the year from an arbitrary date like ours. Instead, they would observe the rise of Sirius on the dawn of the longest day of the year. Known as the summer solstice, Sirius would appear just after the moment of sunrise. This is named the **heliacal rising of Sirius.** The Greek system began when this moment was observed. The moment when Sirius rose like a second sun in the sky.
It may explain why there was no need for leap years. The Greeks used the rise of our second sun, or binary star partner Sirius, to calibrate the solar and lunar calendars.

Egyptian astronomy, Sirius mythology, and ancient calendars.

The Greeks weren't the first or only culture to use Sirius to begin the calendar year. The Egyptian calendar was also based on Sirius. In fact, the Greeks in all likely-hood acquired the method from Egypt.

In ancient Egypt, New Year's Day was signaled by the annual heliacal rising of the star Sirius. In Egyptian, it's known as Sothic. For a long time, it was thought this longer cycle was calibrated to the rise and fall of the river Nile. However, the tidal flooding of the Nile is highly unpredictable.
Sirius in Egypt could be observed on the eastern horizon just before dawn on the summer solstice. The timing of its rise would determine whether an extra month with a few days would be employed that year. The rise of Sirius determined the calendar year.

This method allowed for incredibly accurate date-keeping. The various lunar calendars governed by a 365-day civil calendar moved forward through the season without ever being corrected throughout the entire Egyptian history. Unlike the Gregorian calendar, the seasons stayed alongside the important first day of the first month of the solar year.

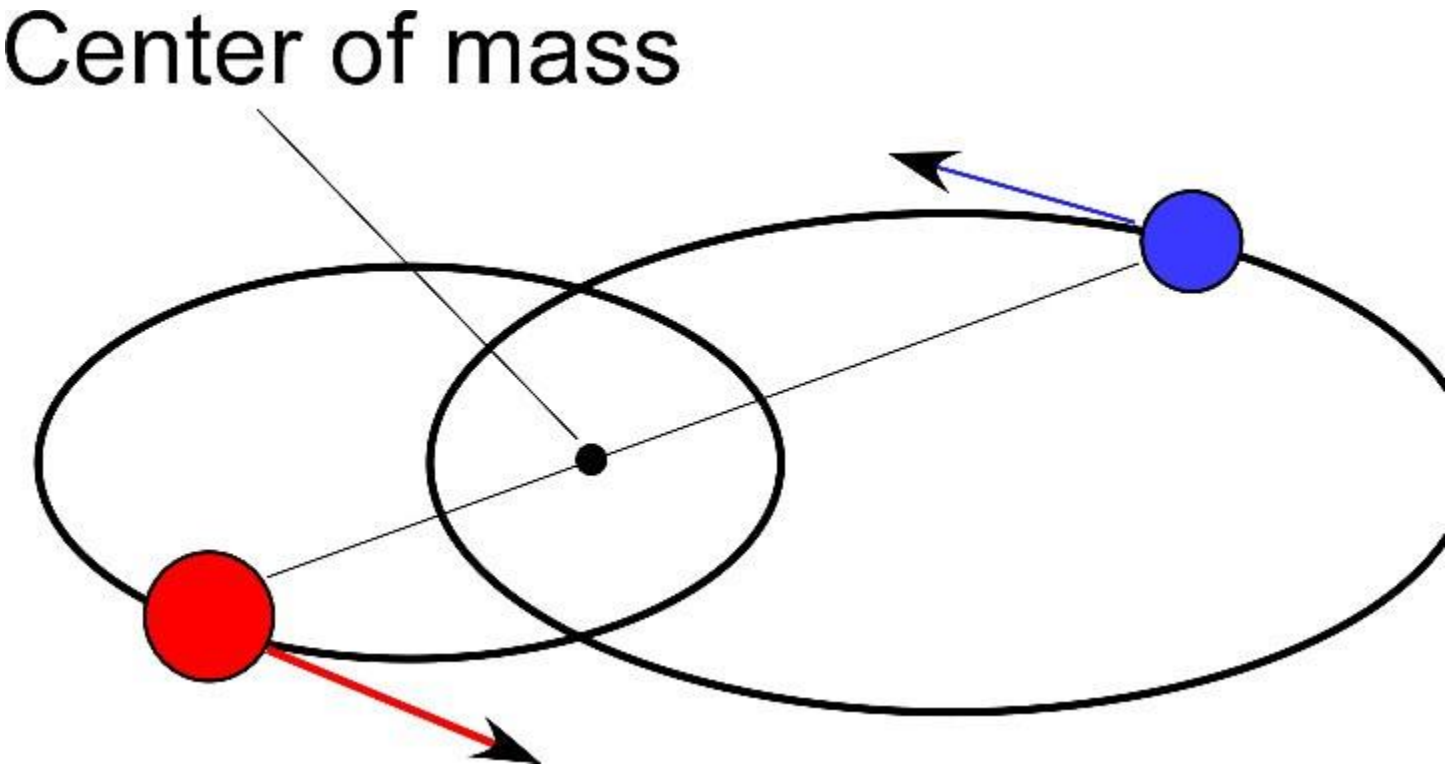
Across the globe, ancient cultures would use this system. In ancient Mesopotamia, to the Dogon tribe in Mali, to the Hindu Yuga traditions across India, to the ancient Mayans in Mexico, New Zealand, and China, Sirius would set the beginning of the year. They all had Sirius mythology outlining its importance.

By the time the Roman calendar was employed it lost the calibration point. Without setting the year to the rise of Sirius, the imperfect leap year method was needed to stop drifting of the seasons.

Ancient calendar systems could be evidence that our solar system is rotating around its binary partner Sirius.

What is a binary star?

Here's how a binary star system works. Two stars rotate around a center of mass, known as the barycentre.



Binary stars orbit around a center of mass known as the barycentre.

If the two objects have equal mass, the size of orbits will be equal. If the two have different masses, the lighter star follows a larger path around the barycentre.

Binary stars systems can exist in double, triple, and quadruple partners. Which may even be possible for our sun.

The types of binary partners for our sun includes:

- **Another star**
- **A brown dwarf**
- **A black hole**

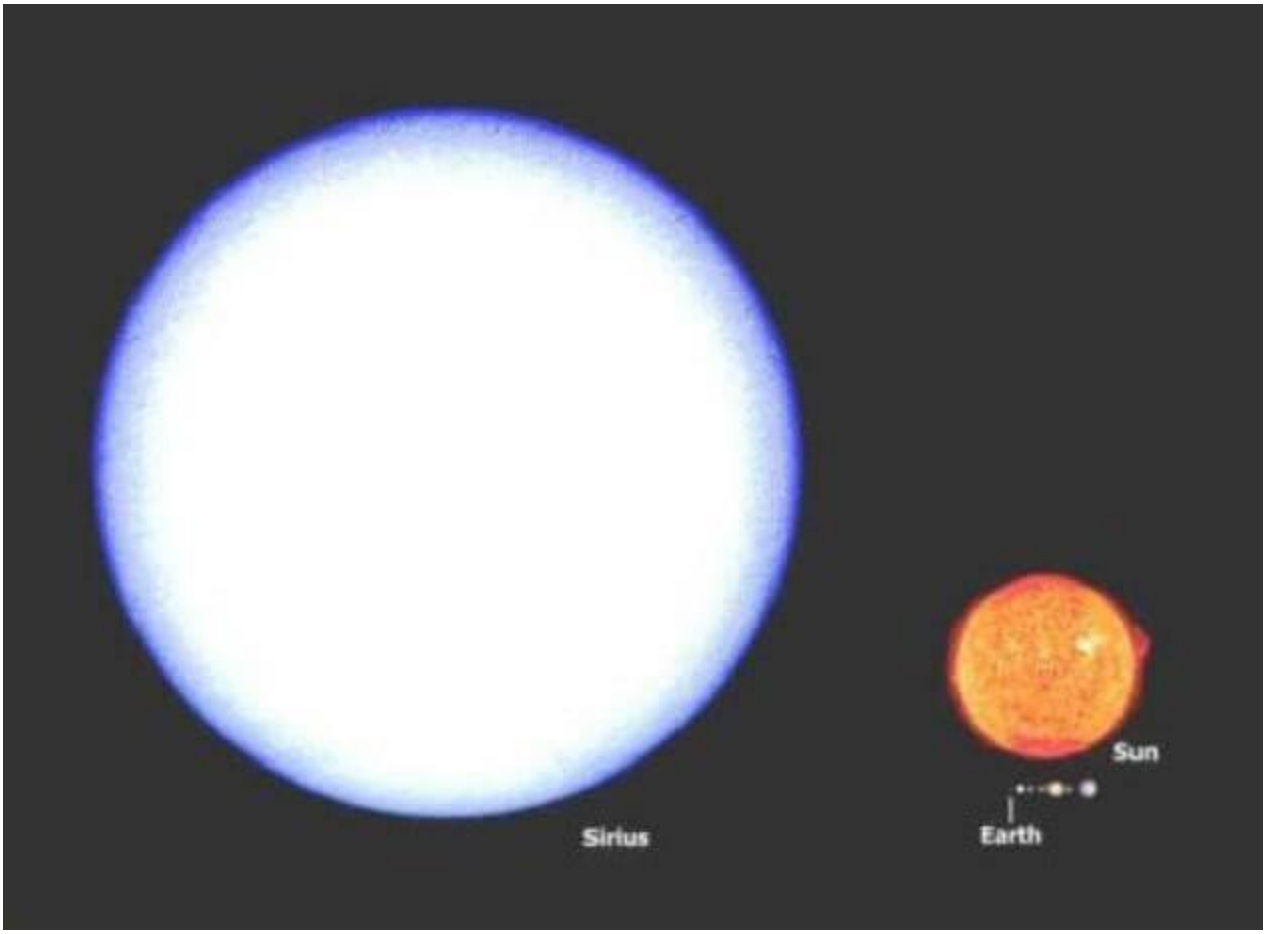
Actually detecting the partner isn't as easy as it sounds.

The star sibling could be a difficult to detect brown dwarf. Or it could be another invisible object. Astronomers are only just detecting low magnitude, distant objects.

NASA has been on the lookout for binary stars. In 2011 the **Wide-field Infrared Survey Explorer** (WISE) completed its 1.25-year mission. It discovered a number of brown dwarfs within 20 light-years. However, none of these were located near the solar system making them unlikely binary partners. The largest non-planet, non-moon object in *our solar system* was found recently. Sedna, and the year before this, KX76 a body larger than Pluto's moon was found. It was discovered after using virtual observatory techniques to comb through 18 years of data in 1-1/2 months.
One possible distance of our second sun (under Newtonian dynamics) is 20 to 30 times farther than Pluto.

Had ancient cultures identified the partner already in the dog-star Sirius?

How does a two sun solar system work?



Sirius A compared to our own sun and earth.

A sun Sirius binary system would mean our sun is the smaller sibling. At 8.6 light years away, Sirius is 71 percent larger than the sun. Sirius isn't a single star but a dual binary (and likely triple star) system.

That means Sirius provides *at least* two larger siblings. The visible blue giant we see in the sky is called Sirius A. It has an almost invisible partner known as the white dwarf Sirius B. A white dwarf star has reached a part of its life-cycle and collapsed to a very dense form.
So dense, Sirius B is **92 000** times the density of our own sun.
Bothse mass and density differences affect a potential binary system. In a dual orbit, our tiny sun would take an extremely wide orbit around **Sirius A and Sirius B.**

So wide, we may not have developed the technology to detect Sirius as our binary yet.

In our solar system, the planets orbit the sun. In the binary star system, the whole solar system orbits Sirius A and Sirius B.

If this is the case, there may be ways to detect Sirius as our second sun.

The precession of the equinoxes and the motion of the solar system

One line of evidence for a binary-star system is the cause of the precession of the equinox. Precession is the very slow movement of the background stars in the sky. It's like a huge celestial clock that moves over a time period of roughly 24 000 years.
The constellation that the sun rises into on the spring equinox acts a the arm of the clock pointing at the hour. Today, the sun rises very close between Pisces and Aquarius. The slow shift of these constellations is the precession of the equinoxes. What causes precession is still thought to be the Lunisolar theory. It's the wobble of the earth due to the gravity of the moon and sun.
The dynamic universe model has revealed serious problems with the wobble or Lunisolar theory. Newtonian equations that use the Lunisolar theory to calculate the rate of precession don't work. They set the movement of the sun at zero (motionless). However, it's now well known that our solar system is moving.

Precession of the equinox is far better explained as a movement of our entire solar system against the background stars. The binary-star system helps fix the Lunisolar theory. It includes the speed of movement of the sun, with the motion of the whole solar system that follows.

If precession is the movement of the entire solar system, the question remains. What are we orbiting around?

Can we now link this orbit to the binary partner Sirius?

Precession is the measure of the sunrise against the background of star constellations on the spring equinox. The constellations move like a 12-handed clock across the sky.

If Sirius is the sun's binary partner, like the sun, it should have no motion against the star background. In other words, Sirius should not precess, as the rest of the star background do.

For evidence, we can look at the history of Sirius in the sky. In Egypt, the rise of Sirius on the horizon marked the beginning calendar. For agricultural importance alone, it signals the flooding of the Nile that happens soon after.

This method defies observations of precession of stars. Why would Sirius remain in this one spot? Sirius should precess along with the other constellations. That's if it's not in a binary orbit with our sun. In which case it would stay steady and rise in the same place.

If Sirius precesses would not be an inaccurate measurement for the flooding of the Nile. Today, the flooding occurs after the June rainy season in Ethiopia. It's where the Blue Nile rises. Sirius' heliacal rising remains a central marker of the year throughout Egyptian history.

So despite precession of the equinoxes, Sirius, and the solstice remained locked at the same distance from one another during most of Egyptian history.

The Egyptian calendar could be evidence that Sirius is steady in the sky. As a binary partner would be.

Today we can calculate the movement of Sirius compared to the precession of the equinox.

Measuring the precession of Sirius– The Sirius Research Group

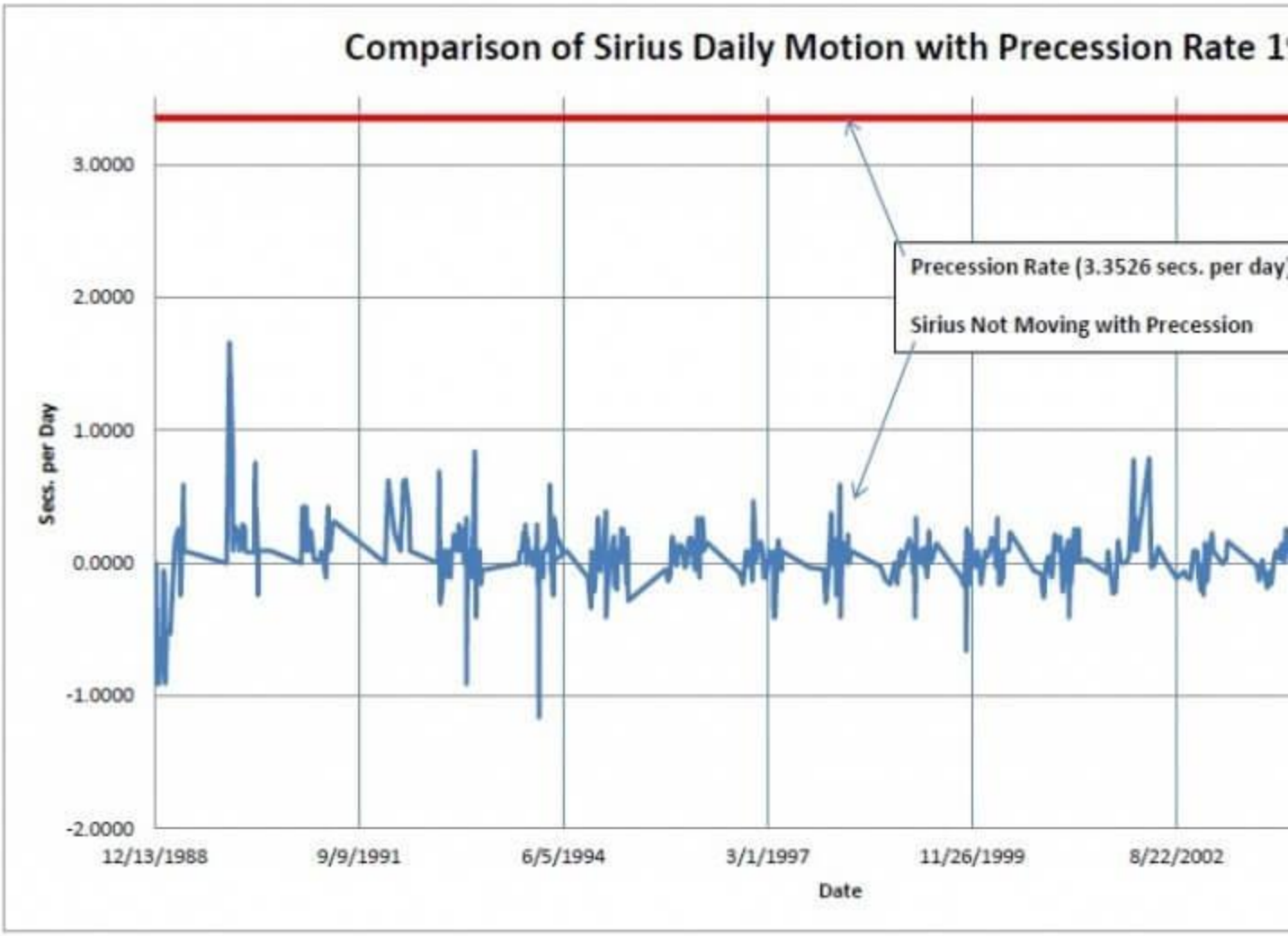
The Sirius Research group has studied whether Sirius does indeed move with the sun. Since 1988 they have recorded the position of Sirius for approximately 20 years. To date, they have recorded NO movement in its location relative to the precession of other constellations.

Every year, on July 4, the sunrise at 30 degrees' latitude (the Giza Plateau or Memphis) the rise of Sirius can be seen.

Throughout history, many accounts have observed Sirius, and the sun locked together.

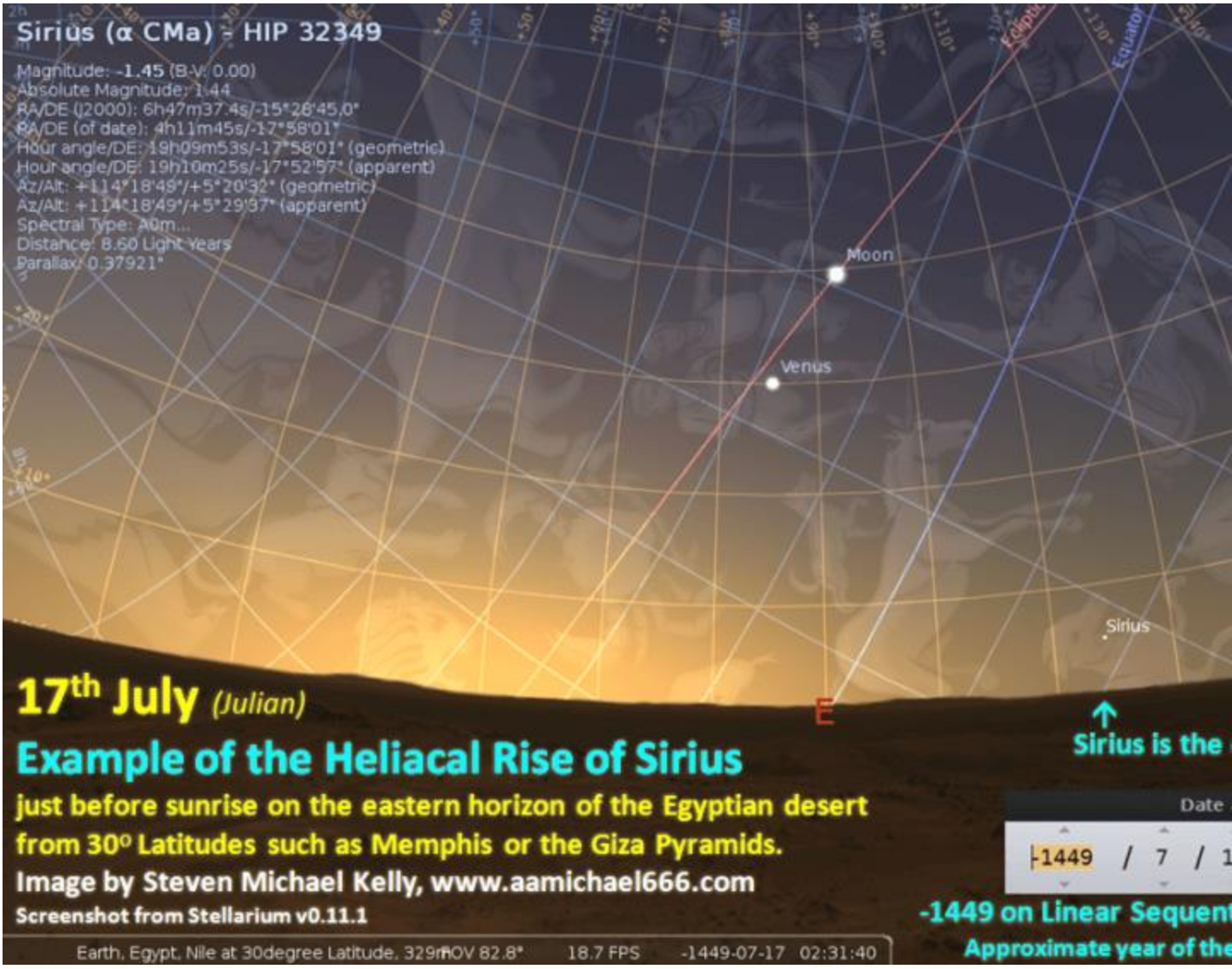
The research looks at the movement of Sirius relative to the position of the sun, compared to background stars. Sirius is displaced in the same direction, almost exactly.
The following graph displays actual measured daily transit readings of Sirius (blue line). It compares this to readings of the precession rate (red line). That's the rest of the stars in the sky.

The data is clear evidence that demonstrates that ***Sirius does not precess.***



Transit of Sirius compared to the precession of other stars in the sky. Source

Is Sirius our Solar System's second sun?



The heliacal rise of Sirius just before sunrise on the eastern horizon of the Egyptian Desert. Source

Proving that our sun is a binary sibling to Sirius could be one of the biggest finds of the 21st century. The evidence is etched into thousands of years of ancient astronomy and calendar systems.

The Gregorian calendar deviates precisely in its start point from the heliacal rise of Sirius. Leap years are a fudging method to stop the drift, but it still happens, and the shift in seasons is now recorded by climate scientists.

Today, astronomers have confirmed both theory and observations that support a binary system. Unlike all the other stars in the sky, Sirius does not move against the sun during the precession of the equinoxes.
The 4th of July rise of Sirius may be the precise way to measure the beginning of the year. That's the point in time when the earth, the sun, and Sirius all line-up together. It occurs during their orbit around a central point. That central point may be a third binary partner. Let's leave possible third binary partners for another day.
From there, our sun and Sirius continue their majestic dance, moving apart, and inevitably back together.

This was a short exploration of the basis of the binary star theory. The Human Origin Project will be following the evidence of Sirius as a binary partner to our sun.
Now we want to hear from you. What evidence do you believe is most compelling behind Sirius mythology, the two-sun theory, and the problems of the Gregorian calendar.

Binary Stars

Many ancient cultures have said that our sun has a brother or sister in the sky.

You may laugh at this yet civilizations all around the world have said this.

We have the Gregorian calendar which Augustus and Julius Caesar added days to the calendar.

One had to appear more powerful than another.

It was mostly out of ego, not a good and practical idea.

Every four years we must have a leap year to make up for their unwise decision.

Lately, scientists have said that most stars are binary stars.

Many modern-day scientists are beginning to accept the wisdom of the ancient ones.

Many ancient cultures have said that the sun revolves around a distant star.

It takes around 12,000 years to go around the star.

After 12,000 years it proceeds to orbit backward.

This 24,000-year cycle has been explained in many indigenous cultures around the world.

The ancient astrologers mapped out a cycle that goes from darkness to light in this manner.

It seems like the universe is a part of us and we are a part of the universe.

Guru Nanak once said that everyone knows that the ocean contains a drop of the ocean.

But only a wise man understands that the drop contains the entire ocean.

We are so busy texting on the freeway of life that the majority of people never ponder and think what an incredible journey we are on.

We are going from darkness to light

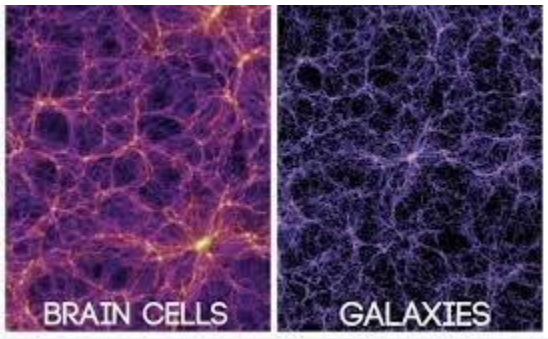
The Great Central Sun

July 6, 2021

The Great Central Sun

[15]Everything in the material sphere has a corresponding yet hidden spiritual component. Another way to think about it is that everything has a soul. Everything has an animating principle, an invisible, ethereal portion that is connected to the Creator. Everything from dense rock, plants, animals, human beings, all the way up to planets and stars has a spirit. This concept is one that Scientific Materialism refuses to deal with even though their own experiments prove it to be true. If we have a "science" that's concern is only to catalogue what can be measured objectively with our senses then we are missing out on 95% of what's happening in the Universe. Through meditation, psychedelics, out-of-body experiences, psychic events, and altered states of consciousness of all kinds we're given a glimpse into what's possible in this vast and eternal spectrum of oneness. The scientific issue is that these are mostly subjective experiences, even though there have been many studies that verify the existence of ESP, science requires objective reasoning so there's a paradox at play. How are we to bridge this gap between the supernatural and the propensity of "science" to ignore the mystical?

[15] https://www.thestarscience.com/blog/the-great-central-sun



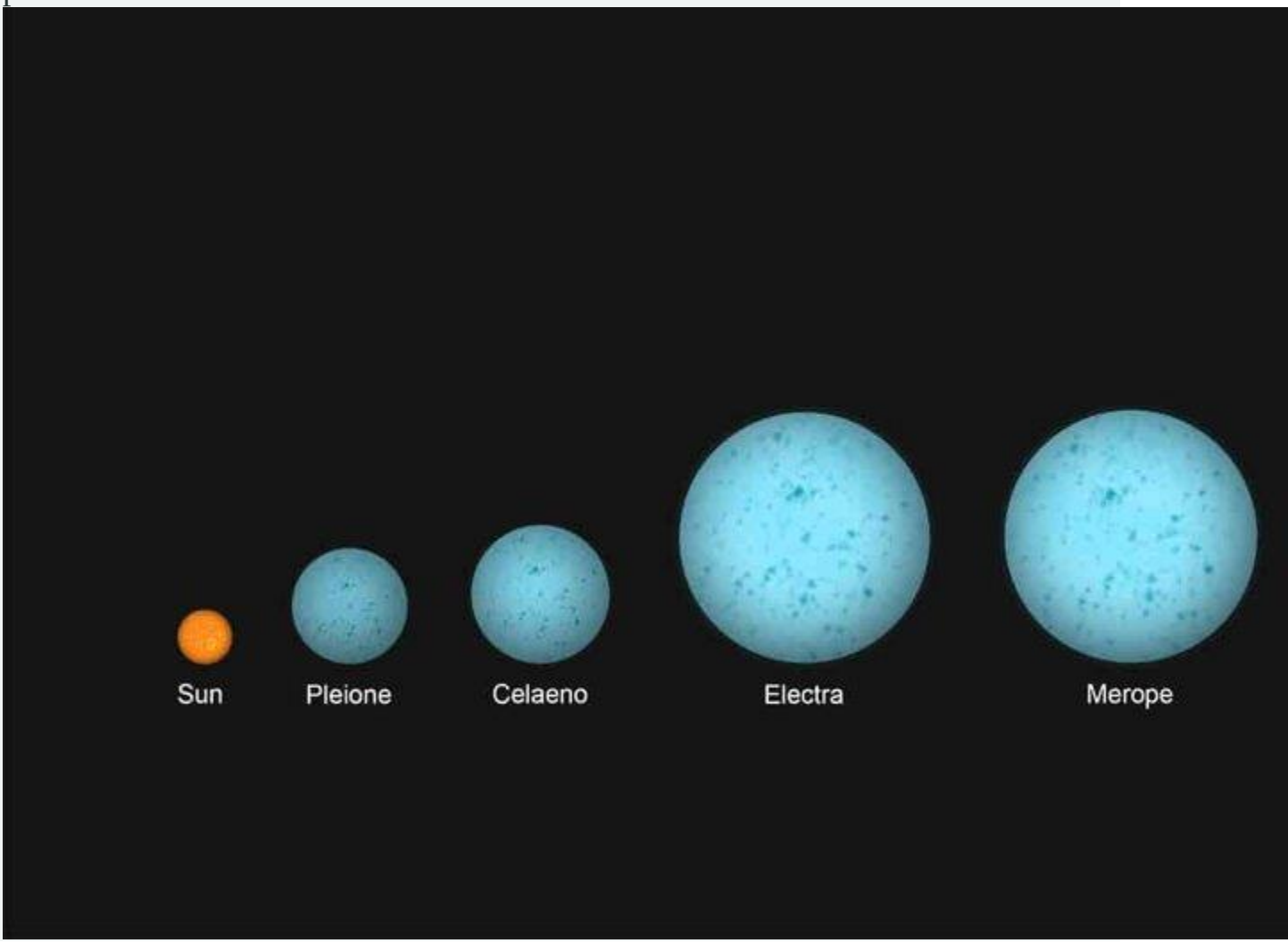
The Universe is a giant mind and it's connected by a neural network, just like our brains, as above so below. It's comprised of distinct energetic patterns held at particular resonant frequencies that interact with each other. This process is so vast and complex that it's impossible to grasp its enormity with our brains because we're a fractal of the larger whole. This network is held together by a system of Central Suns. They are massive hubs of consciousness that govern a specific range of frequency where sub-levels of creation can take place. These Central Suns are conglomerates of consciousness that offer light and love to lower levels of awareness and experience.

In this sense. Suns are like the batteries of the Universe. The wattage of each Sun has a different resonate power and frequency that's right for the level of learning that its particular solar system needs for growth. Each Sun is inherently connected to the light of Source energy so stars, Suns, and Central Suns are energetic portals that help to illuminate their portion of the Universe with the Creator's loving light. It's a point of integration between Spirit and Matter in the cosmos. Each Sun has its own Spirit that resides in another dimension containing millions of elevated consciousnesses.

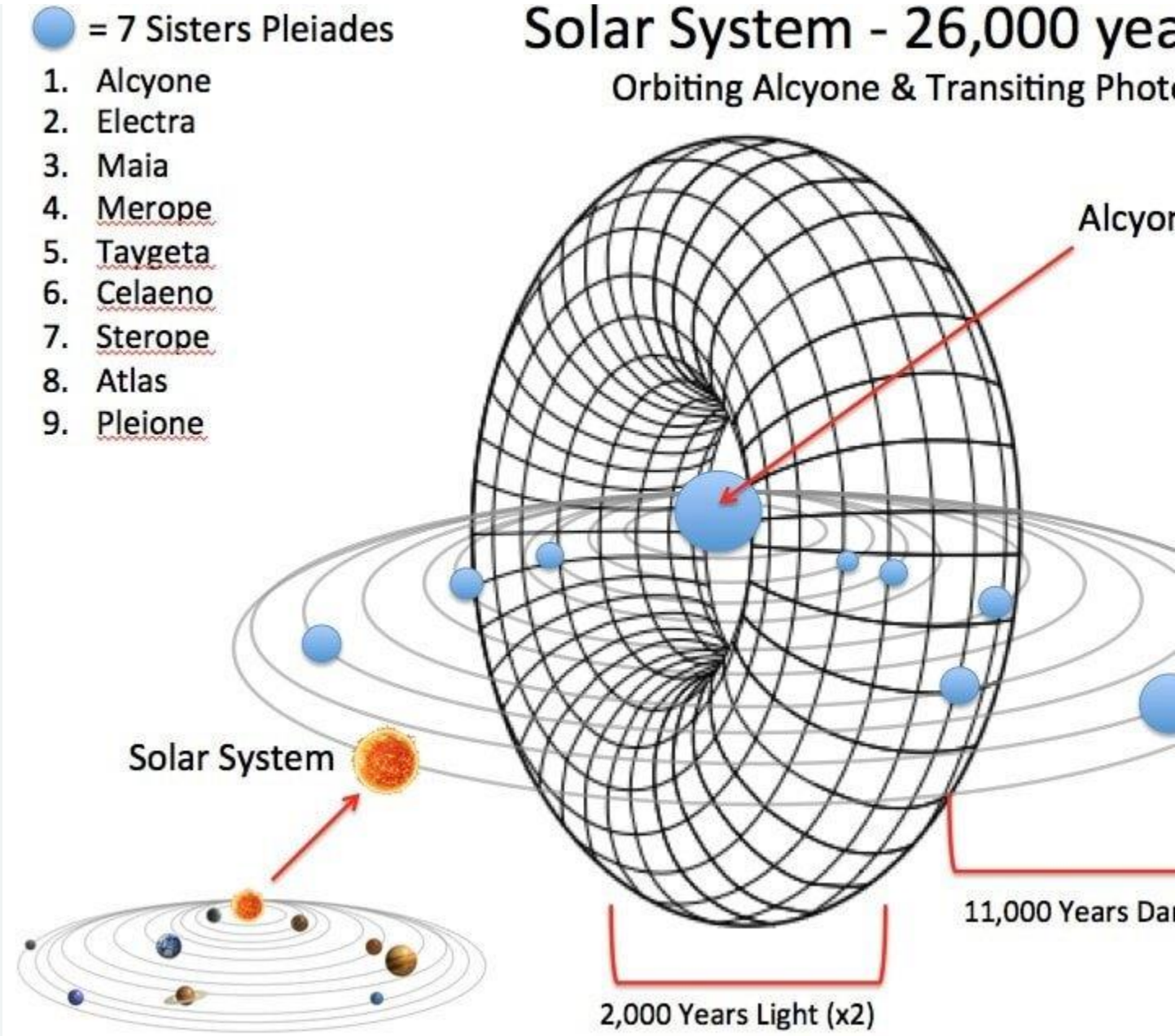
These Suns are like a filtration system for the loving awareness of the Creator. They help sustain life and feed the growing levels of consciousness of the substrata that they govern and cultivate higher levels of awareness in the evolving life in its system. The power of Source is so tremendous that it will vaporize any consciousness whose resonate frequency is at a low vibration, so the Suns and Central Suns help to transmute this light into more manageable frequencies

enabling lower levels of awareness to grow towards this immense vibration of love.

In our solar system, our Sun is part of a larger network of Central Suns. Our immediate Central Sun is Alcyone, the brightest star in the Pleiades cluster in the constellation of Taurus. It's part of the grouping we call the Seven SIsters. It's about 6 solar masses or 600 % of our Suns mass. It's also 10 times the size so it's gigantic. Our Sun is in constant communication with Alcyone. It's like a cosmic dance that the two engage in as a way to pass information, energy, and insights on to the development of ascending collectives in this part of the galaxy. When our Sun gets closer to Alcyone consciousness ascends. As it moves further away, a period of darkness results.



This process is part of a 26,000 year cycle where our Sun, and solar system, completes a full cycle in its orbit around the Central Sun. It's also connected to a larger 500,000, and 2,000,000 year cycles as we return to our source back to the Creator. As our Solar System makes its way through the Universe it passes through various energy fields in space. We are closing in on one of those energy fields now known as the Photon Belt. This is an incredibly spiritual field and is part of the even Greater Central Sun in our galaxy, Sirius. Photons of light emanate from the Central Sun and bathe our planet as we pass through it. It's a process whereby the darkness of egoic unconsciousness is illuminated and upgrades in awareness transpire. It's a process of synchronicity where our Sun, the Central Sun, and the Greater Central Sun align at the galactic center. This system is part of the Yuga Cycle, a cyclical pattern that initiates the decline and expansion of consciousness. We're seeing a spike in awareness as more people wake up and darkness is exposed.



Sirius is roughly 26x brighter than our Sun and shines like a shimmering diamond in our skies. Many of the fixed stars in astrology are sending us beams of information and it can be beneficial to identify and communicate with them in the night sky when the opportunity arises. To have a planet or point in your chart at the degree of a fixed star has great meaning and effect on the life trajectory for better

or worse. Regardless, the fixed stars are powerful portals of information transmission.

Think about the enormous force that our Sun exerts in our little corner of the galaxy. It takes immense power to hold 9 planets and thousands of asteroids in it's orbit. Then contemplate the task of the Central Suns in holding entire solar systems in it's grasp and we can get a sense of the magnitude of this galactic system of spiritual enfoldment.

The **Grand Central Sun** is the connection to source energy for all conscious existence within our universe. It's like a giant battery that filters energy from Source and parses it out to other Central Suns so conscious awareness can grow in lower levels of experience all the way down to dense matter. So we are all connected to Source. Everything in the Universe is connected to this great Mind, all layers of consciousnesses up the ladder to our universal consciousness. The Universe is like a machine that absorbs conscious experience had by its lower-frequency components (all galaxies, systems, planetary realms, and incarnate beings) and shares that wealth of experience back to Source.

Everything is light. The entire Universe is comprised of the light of the Creator but at present our senses and instruments of measurement cannot detect the frequencies of light that fill the void. One of the purposes of this matrix dreamland is to shed the distortions and projections and open up to the light within us. It's like a maze where at the center is you and you are made up of loving awareness. But we must use the illusion of the matrix to awaken. This is what Jesus meant when he said

“The Kingdom of Heaven is within.” It’s not in this external material sphere we call reality.

The nature of the Sun is giving. It radiates light, heat, and energy and asks nothing in return. This is what we are all striving towards. To become beings that radiate life force energy with great power and wisdom. As we move towards the Central Sun it sends messages and vibrations that upgrade consciousness. If it feels our love it feeds it. If it feels our fear it sends us experiences that open us up to love and sometimes these can be difficult and full of upheaval. In the light, we can see the mirror’s reflection. We should all be striving to shed ourselves of ignorance and move towards the realization that underlying literally everything is an immense vibration of loving awareness. Coming into alignment with the Central Sun means opening the doorway of the heart and transmuting fear into love. We can move into a higher dimension where fear does not exist, our hearts burning with the fire of the Sun. So ultimately there’s nothing really to worry about. Even though ignorance and darkness seem real on this plane of existence, it’s all trending towards the light. We’ll all make it there one way or another, it’s just that the ride may be bumpier for some.

Bless.

[A GREAT CENTRAL SUN The Herald Democrat, November 23, 1909]

SIRIUS - THE GRAND CENTRAL SUN - THE GOD STAR

Justice Bellucci • 6.3K views

Great Central Sun is a source and Center of the All-Pervading Presence of the Great "I AM" It is a point of integration of the...

The central sun

Imagine before this universe was even created there was the great central sun.

Mind you it wasn't a physical sun.

Modern-day scientists would probably say this is the quantum field.

In this quantum field, there is a universal mind.

Albert Einstein's theory was that we are a fragment of the universal mind.

Each one of us seems so separate and yet our minds are the same

It is quite a paradox.

Anyway, getting back to our story.

The entire universe came from the central sun.

There is a direct connection and interchange of wisdom between the creator and the creation

We are all interconnected.

Unfortunately, we prefer to text on the freeway of life.

This subject matter is much too boring for the average person.

All I need is my Starbucks coffee

Once I drink my coffee maybe I'll listen to you.

Everything returns to its source.

Eventually, the entire universe will someday disappear like a thief in the night.

Yet the quantum field is beyond time and space. It is eternal and infinite.

A wise man understands this following riddle.

If thy eye be single, the whole body will be full of light.

One who experiences this understands the meaning behind these words.

Imagine the whole universe wisdom exists inside of your DNA

If you are eternal that means you have existed for billions of years. How come we don't know that fact? Many of the wise men from the past posed that same question.

Their answer was always you must look within to discover your true nature. Imagine the whole universe wisdom exists inside of your DNA yet we are oblivious to this wisdom.

Many people say they have no need or desire to discover their true nature. No judgment there. You see we are all on different journeys and at the same time we are all on the same journey. That's quite the paradox.

Did you know that the more attention you make to the universe, the universe starts paying attention to yourself?

That's quite the statement. In the beginning, you have to put a tremendous amount of energy into focusing within. After some time, there is a shift and the universe meditates on you.

Inside of our DNA contains every life experience on this planet and beyond. You see you helped create the universe. Now that's mind-boggling if you stop and think about it.

Did you know that there is a part of you that exists in the entire universe? This is your true nature. Yet we come into this world with full knowledge and over time we forget our true nature.

Even after meditating for 47 years we only get glimpses of who we were in the past. Maybe there is a reason behind this. We don't want to get stuck in the past. We are on an infinite journey of learning and growing.

My twin brother and I have this feeling that we came from a different universe altogether. Where does this feeling come from? I have always felt that I'm a stranger in this world.

From the moment go I knew that I came from the stars. I knew that inside of me lies the universe, Yet I didn't know how to tap into it. I always knew that meditation was the key.

Yet I thought that only a teacher or Guru could show you the way. Yes, they provide tremendous help along the way. Yet they can't walk your journey. Only you can unlock the door within.

I have realized that behind your breath lies the universe.

Jain Studies And Science: Universe (Lok)

Author: Dr. Mahavir Raj Gelra

Published: 23.02.2009
Updated: 02.07.2015

[16]Jains envision the entire universe to be comprised of six entities (we have christened them as **mattereals**)-

1. *Dharm-astikaya* (Medium of movement)
2. *Adharm-astikaya* (Medium of rest)
3. *Akash-astikaya* (space[19])
4. *Pudgal-astikaya* (Sthul-matter & Sukshma-energy)
5. *Jiva-astikaya* (conscience/intelligence)
6. *Kaal*[14] (time)

All these six entities (mattereals) co-exist simultaneously to manifest the Universe. Interestingly, science[18] even today cannot add or subtract anything from this all exhaustive list cited above. Jain literatures call the universe as *Lok*. Excluding this finite *Lok* is said to be infinite *Alok*. Jain philosophy[12] has laid a logical foundation to the ever enigmatic questions of creation of universe, its extent, its composition and its time factor. Founding postulates of Jains are-

- There is a **finite and tangible *Lok*** situated in the midst of an **infinite void called *Alok***.
- *Alok* is infinite, yet the relative positioning of *Lok* with respect to *Alok* is well defined as the **directions travel in the *Alok* as well.**
- *Lok* has a **well defined and stable geometrical shape.**
- *Lok* has fixed basic constituents which are **finite and maintain a constant sum.**
- Activities within the *Lok* are so spontaneous that **it is not created by anybody.**
- *Lok* possesses **default intelligence and not the designed one.**

[16] https://www.herenow4u.net/index.php?id=67824

- Periods in *Lok* have starts and ends, but **cycles of periods are eternal -** having neither beginning nor end.
- Matter present in the Universe is dynamic by way of transportation and transformation, which is the very basis of LIFE.

Mahapragya[15] explains that the Jains could find above universal Laws as they do not believe in the authority of GOD as the creator or perpetuator. According to him, modern science[18] also does not support the idea of universe being created and conducted by any supreme-power.

Statements of Einstein[7] and Hawking

"God is left with nothing to do, as the disciplined Nature is governed by its own laws and principles" - how close Einstein[7] is to the Jain view point! Bestseller physicist and well known contemporary scientist Hawking, too, believes that the cosmos is no-beginning no-end phenomenon. A lot of scientific investigations are going on today in the field of astrophysics. Largest of the large and smallest of the small are keenly scrutinised by the modern scientists who are equipped with latest electronic telescopes and fastest computers to analyse the enormous data. While at one end they are eager to know massive black-holes, on the other hand they are enthusiastic to study the minutest particles like quarks and gluons. It would therefore be relevant to undertake a comparative study of Jain Philosophy[12] vis-a-vis Science[18]. To start with, we shall first chronologically arrange the history of cosmic studies.

History of Universal Exploration by Scientists

1. Scientific study is presumed to have started with Copernicus in 1514 when he, for the first time, declared the sun as the centre of our planet system contrary to the then prevailing idea of Earth being at the centre as proposed by the Greek philosopher Aristotle[2].
    - **This established the first fact - Orbits of our solar system are sun-centric and not geo-centric.**
2. Unlike our modern times, where a new concept is introduced every year, it took almost 100 years for Galileo to confirm it way back in the year 1609.
3. Around the year 1687, an idea was mooted by Sir Newton[16] about having an infinite static universe. But his own theory of gravitation contradicted it. Owing to the gravitational force, the stars in static universe will fall into one another and the universe would have collapsed.
4. As the Solar system was thoroughly understood and mathematical orbits were established solidly, scientists turned their attention to the outer universe. Arguments

kept on waging about whether the universe had a beginning or is eternal. We shall see later in this chapter, how Jainism[13] solves this dilemma.

5. After another 100 years, in the middle of nineteenth century the idea of eternal universe was discarded by scientific fraternity. It was because of a very simple logic. Had the stars around us were shinning since infinite time, rays from all the stars would have reached us by now and the earth would have received so much of energy that it would have been blown up by now. By the same argument all the other cosmic bodies too would be infinitely heated up.
    - **This established the second fact - the Universe had a beginning.**
6. Next milestone in this journey came relatively faster in the year 1929. This only confirmed the fact that the universe had beginning. Edwin Hubble observed that the cosmos is expanding as the galaxies are rocketing away from each other.
    - **This established the third fact - the Universe is expanding.**
7. The immediate conclusion was that these galaxies were near to each other sometime in past. In fact, so near to each other that the universe occupied near zero space[19] and possessed near infinite density.
    - **This established the fourth fact - the Universe started with Big Bang.**
8. However several important questions still remained unanswered. Having consensus on the beginning, question now nagging the scientists was about the end? How long will the universe expand? Will it collapse after the momentum of big bang is reduced and the forces of gravitation take over?
9. By the turn of twentieth century, the study of universe was fully transferred from philosophers and meta-physicists to the scientists and astronomers.
10. In twenty-first century, this study is now employing complicated electronics, advance mathematics and latest space[19] technology. The concentration[4] is on - 'Cosmic Microwave Background' - the ultra high frequency radiations emitting from a hot body[3]. Since the universe is presumed to be extremely hot at the time of big-bang, the frequencies emitted then can reveal the correct picture, if detected.
11. **To sum up - the present cosmological picture painted by scientists is as follows:**
    - Age of the universe is around 14 billion years and it is by and large homogeneous.
    - It is full of lightest elements, like hydrogen, helium and lithium.
    - It has abundance of cold dark matter[5] - huge clouds of particles that are detectable by their gravitational effect only. This finding is astonishingly close to Jain philosophy[12].
    - Within a fraction of a second, the universe inflated at a tremendously accelerated rate simultaneously releasing burst of radiation.
    - Soon after inflation, the regions of high density were acted upon by the cold dark matter[5] to form the galaxies.
12. **What Scientists have failed to explain:**
    - Boundary, shape and size of the universe?
    - What was before Big Bang and what initiated it?
    - As the three space[19] co-ordinates can be drawn by assigning a suitable zero, time-factor too, can be described in terms of elapsed time with respect to some

reference. But when we are talking about universe, we need to know the absolute zero co-ordinates of space[19] and an absolute zero moment of start of time. Both are eluding science[18].

- If it is expanding, how far will it expand? OR will it collapse after the momentum of far off galaxies diminishes?
- If all the matter was together at one point of time (Big Bang), and no matter can travel faster than speed of light (as predicted by quantum mechanics[17] and the general theory of relativity), why stars and galaxies are out of our sight?

Answers from Jainism[13]

1. *Dharmastikaya*[6] (dynaons) & *Adharmastikaya*[1] (statons) Duo:

The description of this duo, comprehensively answers the dilemma of Universe's boundary. According to Jainism[13], the spatial extent of this pair is finite, has a defined shape and outlines the boundary of universe. We shall discuss more about the shape of Lok later in this book. Continuing the discussion about the six (interestingly, these are divided into three pairs) mattereals, the first one is *Dharmastikaya*[6] (dynaons) & *Adharmastikaya*[1] (statons). Both are metaphysical in nature, omni present and static. They cohabitate only as a passive, seamless and continuous media. They are entirely absent in the *Alok*. The other two pairs viz., *Akash-Kaal*[14] and *Jiva-Pudgal* exist only up to the limits earmarked by dynaons-statons. We can understand it with the analogy of a swimmer in water. Water is just a medium. This analogy is crude with the difference that dynaons and statons do not themselves get disturbed due to any material activity.

Scientific fraternity has always wondered as to what exists between the nucleus and the orbiting electrons or between one atom/molecule and the other. At one time the concept of ether[8] was in vogue, but present day scientists deny its existence.

a. Dynaons (*Dharmastikaya*[6])

Dynaons are omnipresent throughout the universe. They are supposedly cubical particles interleaved in such a manner that they form a continuous, monolithic medium and the *Gati*[9] (dynamism - that is why we have named it 'dynaons') of all the other mattereals is attributed to them. They, in other words, are super highways of energy transportation. Even electromagnetic and light waves traverse in the presence of Dynaons {*Dharmastikaya*[6]). Since they act as a medium, they do not participate or interact nor do they themselves get disturbed. Therefore, the energy travelling through the medium of dynaons remains undiminished until it interacts with other forms of matter.

Mahapragya[15] observed that if we listened to a science[18] teacher explaining the rules of motions, we felt as if a Jain scholar was giving discourse on Dyanons-statons.

However, it must be noted that the science[18], during the Newton[16] era, believed in presence of' **'Ether[8]' as a medium of motion.** But later on, Einstein[7], on the basis of Michelson-Morley experiment, ruled out its existence. He argued that since the velocity of light remains a constant to all observers whether dynamic or static, the very presence of ether[8] is dispensable. All arguments of ether[8] being a metaphysical entity were discarded and Einstein[7]'s view prevailed. But, believers of Jainism[13] will find it interesting to note that the things have come to the full circle as scientist now need a 'medium' to explain the way gravitational forces act!

b. Statons (*Adharmastikaya*[1])

An anti-matter to dynaons, these particles co-exist with them and are medium to gravitation (*sthithee*). Their presence actually completes the picture of universe. Scientifically, we all know the matter would collapse under gravity if the gravitational forces are not counter balanced by forces of velocity. Electrons are orbiting to avoid collapsing into the nucleus. Earth is orbiting so that its centrifugal force is equal to the gravitational force of sun. The solar system, in turn is rotating and so is our galaxy, the Milky Way. Even all the other galaxies, which we know of, are spinning presumably to prevent fall under gravity. Jainism[13] states that all forms of matter take **SHAPE** only when the forces of energy are at equilibrium with the forces of gravity. Jainism[13] therefore does not believe in Designed Intelligence but proclaims **Default Intelligence**. In the former case, the universe becomes somebody's discretion, whereas in the latter case, it spontaneously exists under certain fundamental rules.

It is amazing that no other religion on this earth has promulgated the presence of all encompassing mattereals as is done by Jainism[13]. And as we have understood so far, how near the Jain philosophy[12] is to the modern science[18]! It even can extend helping solutions to some of the enigmas faced by the scientists regarding the boundaries of universe and the extent of time.

Conclusions of Science[18] (so far):

Scientific evidences point an explosive start by Big-bang and extrapolate a catastrophic end of universe by Big-crunch. Though many questions remain unanswered in between

the two. Prominent among them are - what before beginning and what after the end? These questions have compelled scientists to think like philosophers!

According to Einstein[7] the moment of beginning is singular and unique, thus laws of physics come into force only after the big-bang. Dr. Hawkins explains that anything which existed before is destroyed by the big-bang and so there is no need to know whatsoever existed before it. Succinctly, anything before big-bang has no consequence in the present universe.

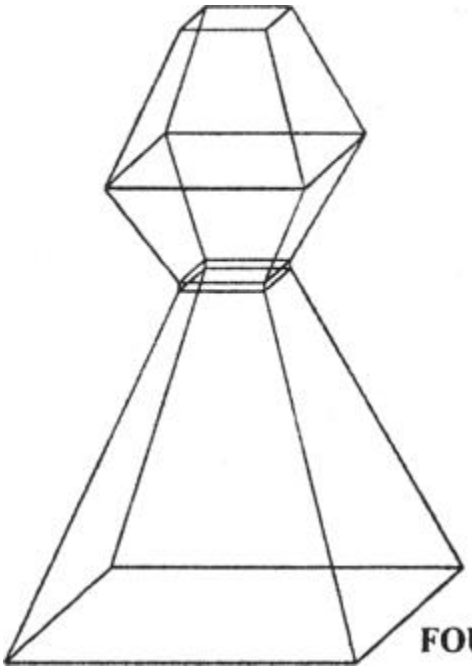
Conclusions of Jainism[13]:

Among all extensively followed religions like Hinduism[10], Jews, Christians, Islam[11], the universe is presumed to be created (by GOD). For the first time in the known history, famous philosopher, Aristotle[2] put forward the notion of no-beginning-no-end. Mahapragya[15] too has written in his earlier literary works that Jainism[13] does not support 'beginning' and 'end' theory. He writes that central to entire 'Jain' theme is:

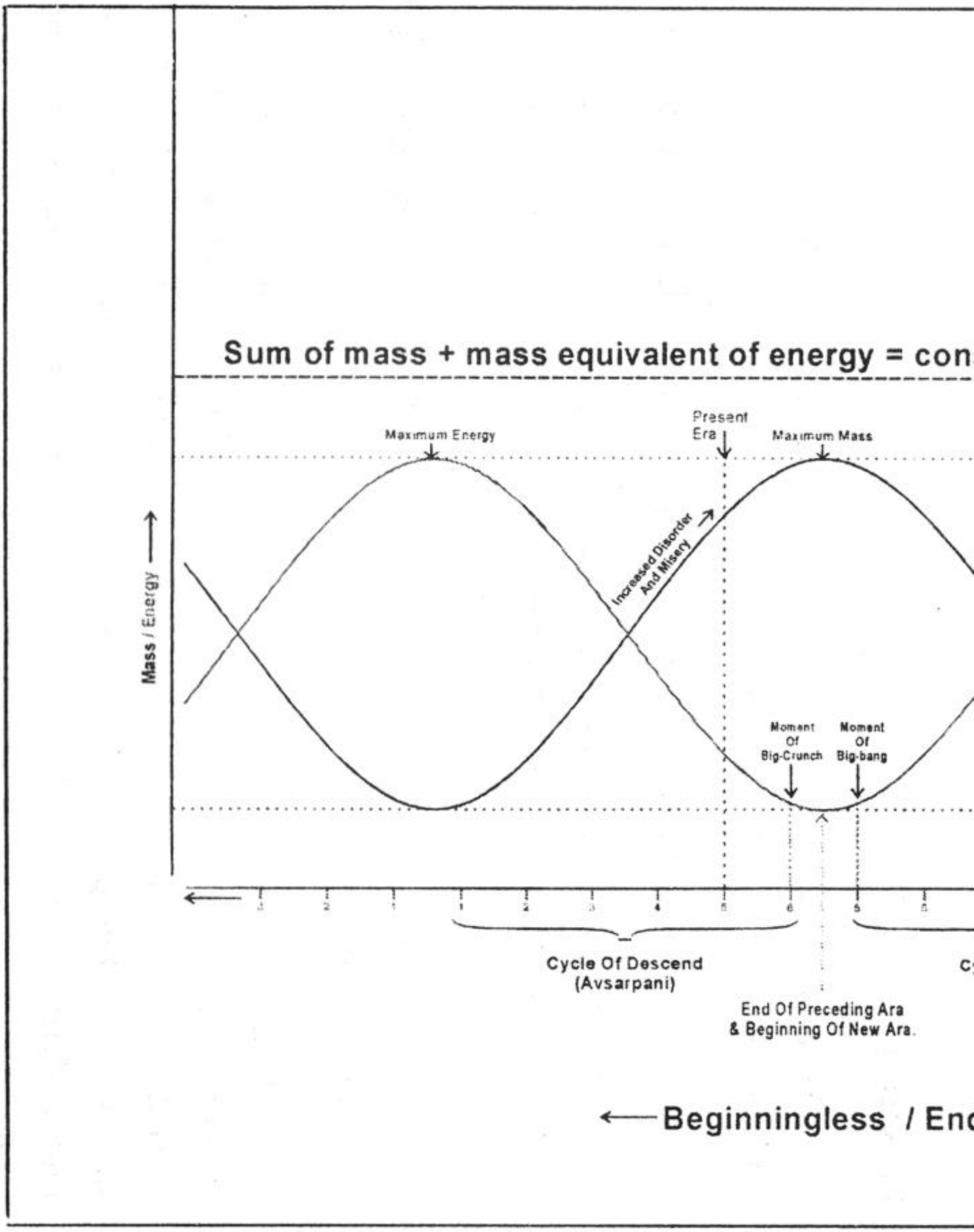
- Everything in the universe is
    - dynamic
    - finite
    - cyclic

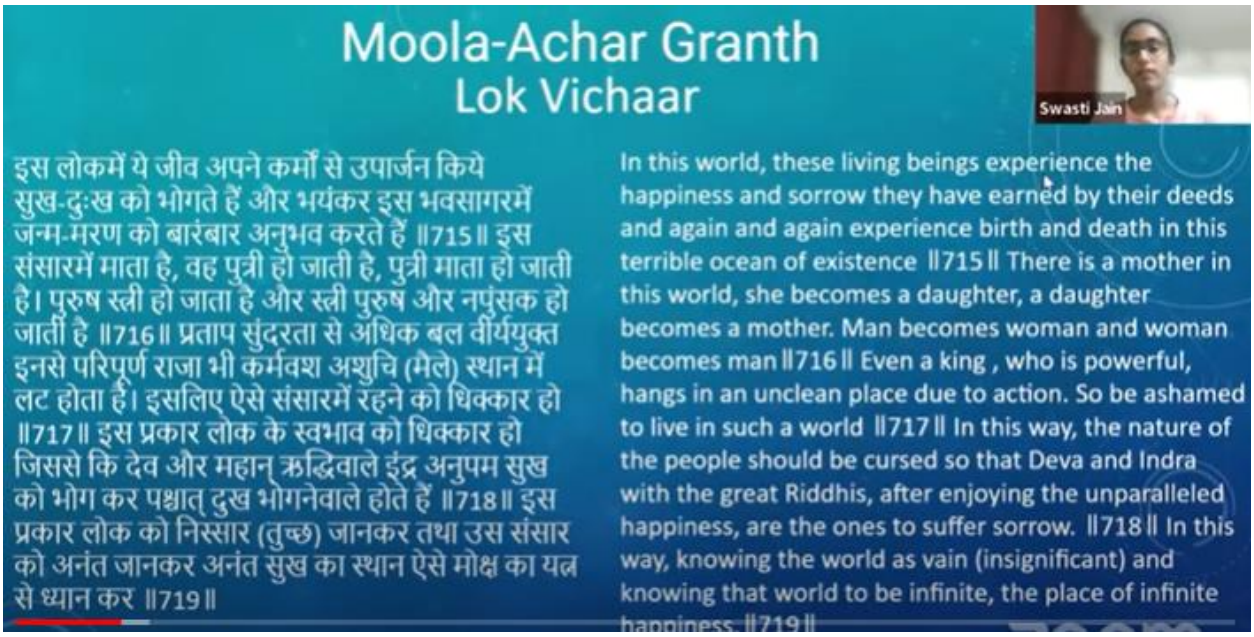
Accordingly, the universe neither gets completely destroyed nor is created out of nothing. The following time-energy-matter graph clearly depicts the Jain ideology.

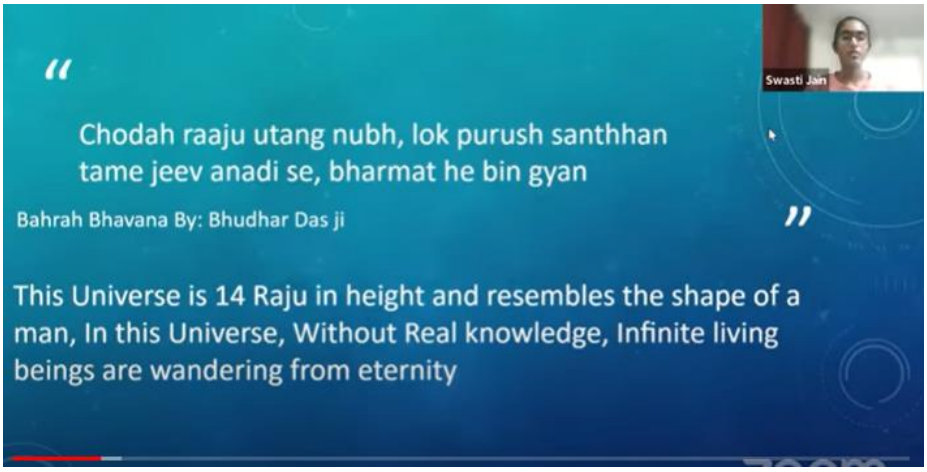
As is manifested above, the matter of universe appears to vanish into pure energy at the end of each era (descend). According to the Jain philosophy[12], it is sixth frame of descending cycle (called *Avasarpani*). It remotely resembles what we know as moment of destruction or big-crunch. From the second frame of ascending cycle (called *Utsarpani*) the creation of matter starts again. This resembles the moment of creation or big-bang. This cycle of ascend and descend is perennial. Jains have designated a period of five *Bharats* and five *Airavats* to each of these cycles. As is clearly depicted, the matter and energy transmute into each other but in totality no destruction or creation takes place. Here, the Jain philosophy[12] explains what science[18] could not - the state of universe before 'the beginning' and after 'the end'.



FOUR SIDED FIGURE OF UNIVERSE


Sum of mass + mass equivalent of energy = con
Present Era
Maximum Energy
Maximum Mass
Increased Disorder And Misery
Mass / Energy
Moment Of Big-Crunch
Moment Of Big-bang
Cycle Of Descend (Avsarpani)
End Of Preceding Ara & Beginning Of New Ara.
Beginningless / End





I find it fascinating that the universe is 14. Raju is in height and resembles the shape of a man. In the early '70s, I read an interesting article that I never forgot. This article was on astronomy and the universe. The interviewer asked the question at the very last end of the conversation. He said that breathing insinuates that the universe is alive.

The scientist said exactly. Yes, the universe is breathing.

> Lord Brahma only lives for the duration of one breath, and according to our time scale 4,320,000,000 years constitute only twelve hours of Brahma, and Brahma lives one hundred of his years

For the past 50 years, I am absolutely convinced that the universe is alive and conscious. The same breath that we take is the same breath the universe takes. Mind you, one single breath of the universe is an extremely long time.

The same breath that is keeping you alive is keeping the entire universe alive.

The following is from my friend Amar who told me about this course.

The Jain Tirthankaras taught atomic theory to mankind and this can be found in the Jain scriptures. See the Tattvartha Sutra chapter 5, for example.

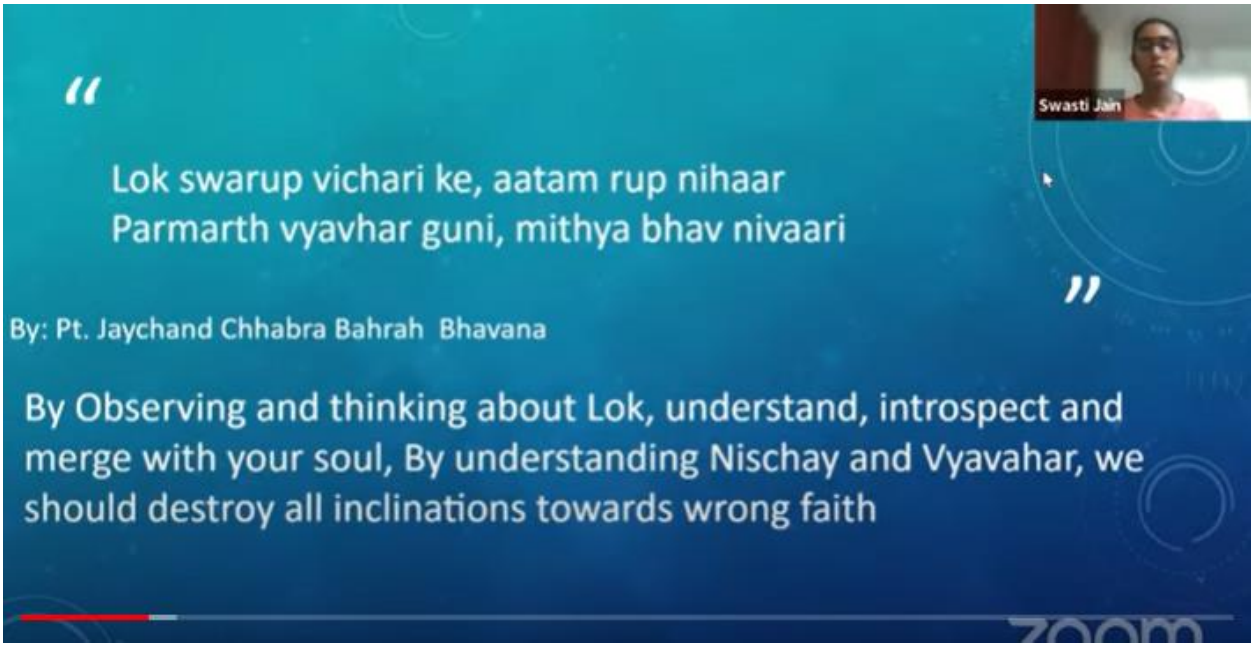
The Jains accurately described the nature of atoms, molecules, subatomic particles, and the two forms of fundamental particles, known as Paramanu. The Jains explicated the conditions under which these particles can combine, and the conditions under which they separate.

They also revealed for the first time in history, thousands of years ago, that matter and energy are part of the same continuing, and that the two are inter-convertible. Einstein would state this only many centuries later in the form e=mc^

1. Jain cosmography appears to accurately describe the proportions of the Milky Way galaxy and our approximate location in it, and even states that all of the stars, planets, and constellations that we see in the sky are actually all rotating about a massive distant center.
2. This ancient philosophy of Jainism also teaches that the world is filled with microorganisms and that these are the agents of decay and disease (at a time when much of the world believed that disease was caused by evil spirits). It's all in the Jain scriptures.

   So, remarkably, things that centuries of generations of people had to take on faith in Jainism, are now being verified by science. There are even scientific studies of reincarnation going on. It's all pretty mind-blowing.

https://jothishi.com/jain-cosmology/
https://en.m.wikipedia.org/wiki/Jain_cosmology



What could be simpler? The more attention you pay to something, the more attention it pays attention to you.

How much attention are you placing in every moment towards your true essence and being? That will determine where you are at this present moment.

Come home, my friend

Come home, my friend.

This is your soul talking to you.

You may think that is impossible.

Yet did you know your soul is eternal?

You were never created.

Therefore, you can never be destroyed.

You exist for eternity.

Tell me do you think I can't communicate with you?

It's the other way around my friend.

I have always been there yet you haven't.

For most of your life, you live in this world and only focus externally.

The more attention you pay to something you become that.

By only paying attention to this world, you have forgotten your true nature.

Did you know that you can be one with me and also at the same time live in this world.?

True happiness never lies in this world.

Everything in your life is impermanent.

Nothing is permanent in your life

Everything comes and goes.

It's there for one moment and then it's gone forever.

If you just stop and contemplate for just one moment, you would begin to see what the great teachers have said in the past.

Nothing is permanent except the true love that lies inside of you.

What are you going to do about that?

The decision is totally up to you.

As for the soul, it wishes for you to come back home.

It has always been there waiting patiently.

I know what is best for you.

Unfortunately, you think you know what is best for you.

If I only had this I would be happy.

Billions of people are doing this every single day.

Does this world seem like a happy place to you?

Only you can answer that question, my friend.

Just think when you know your true home. when you are alive one obtains true happiness in one's life.

Ponder this over.

Go beyond the box that you are living in.

Don't you think that message of hope can come in any shape, way, or form?

Just stop in your tracks for just one moment and ponder this over.

Eventually, you will come home.

The question is how much pain and suffering are you willing to go through lifetime after lifetime after lifetime?

You are on an endless cycle of birth and death.

By knowing your true self and your true nature one understands this riddle.

Closing

My intention in writing this book was for the reader to go beyond the beyond. This life is a miracle. Unfortunately, we take it so much for granted.

During the last year, I have lost many good friends. Time is just slipping away.
One day you are here and the next day you disappear like a thief in the night.
In order for this world to change for the better, we must understand the sacredness of life.
We must learn how to be custodians of the sacred land. Currently, the world at large is consumers.
We can't go on this way. The world around us is reacting to our neglect.
I wrote a poem years ago that we would be sued in the court of our father for our neglect.
The older I get the more I see what a miracle it is that we are alive on this planet.
We will never truly understand life's mysteries
I'm sure the scientist today are blown away by what they are discovering. We understand less than one grain of sand in the entire universe.
Yet we are content with texting on the freeway of life and think that is only what life has to offer.
If I can offer any advice I would say life is a miracle. Don't take it for granted. We are only here less than a second in time.
Somehow we think we have all the time in the world to understand our true nature.