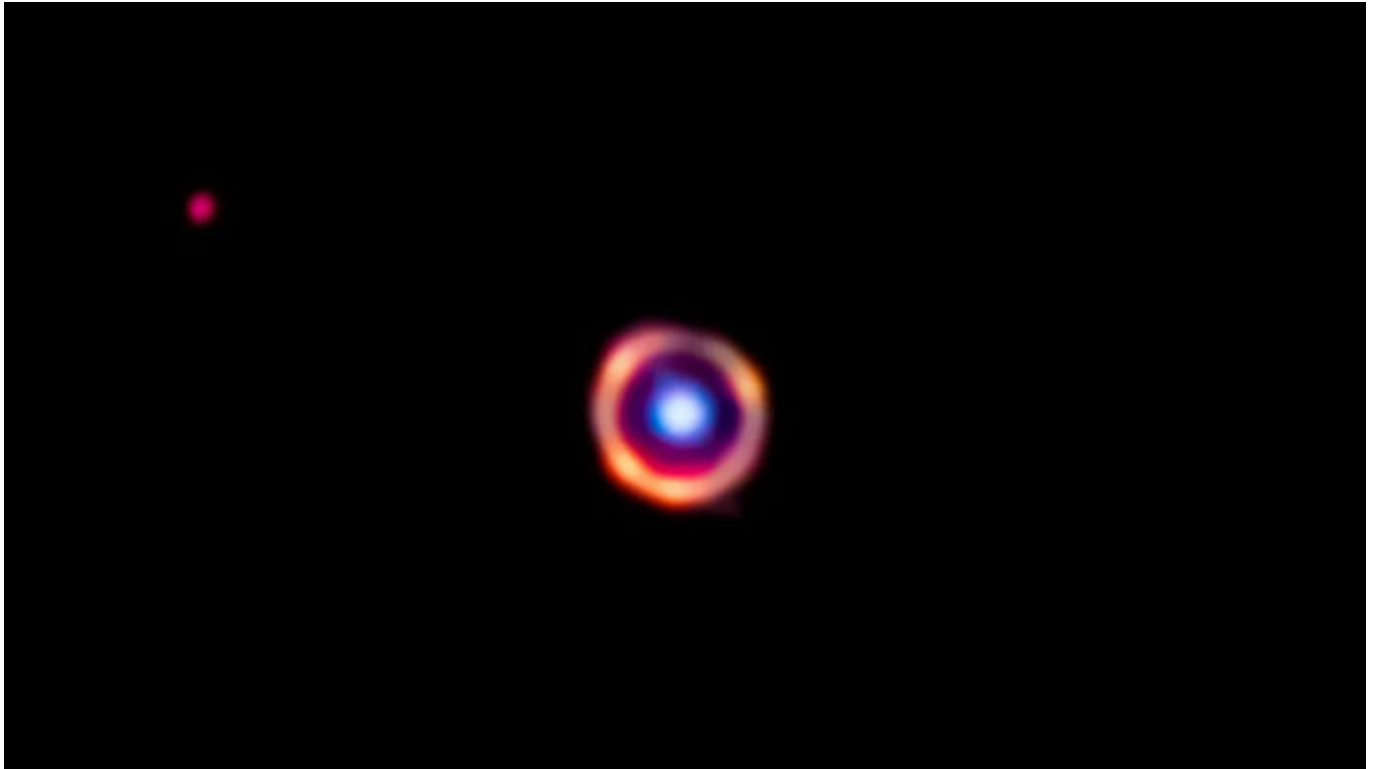


“Webb telescope detects organic molecules in distant galaxy | CNN”



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

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

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

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

Link contributed by Gene Savoy, Jr.

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



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

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

Living In a World of Change and Corruption



"All parts of the world (all things I mean that are contained within it), must of necessity at some time or another come to corruption. Alteration I should say, to speak truly and properly; but that I may be better understood, I am content at this time to use the more common word. Now say I, if so be that be both hurtful unto them, and yet unavoidable, would not, thinkest thou, the whole itself be in a sweet case, all

the parts of it being subject to alteration, yea and by their making itself fitted for corruption, as consisting of things different and contrary? And did nature then either of herself thus project and purpose the affliction and misery of her parts, and therefore of purpose so made them, not only that haply they might, but of necessity they should fall into evil; or did not she know what she did when she made them? For either of these two to say is equally absurd. But to let pass nature in general, and to reason all things according to their own particular natures; how absurd and ridiculous it is, first to say that all parts of thw whole are, by their natural constitution, subject to alteration; and then when any such thing doth happen, as when one doth fall sick or dies, to wonder as though some strange thing had happened?"

~[Marcus Aurelius](#)

Everything Changes

Aurelius is correct in saying that all things in this world change, and that change generally means becoming corrupt, rotten, sick, or dead. There are a few exceptions, but even those are usually signs of aging which eventually leads to death or destruction. It seems a beautiful thing when a caterpillar becomes a beautiful butterfly, but it also means that the animal has reached the last stage of its life and will soon die if it doesn't get eaten first.

Don't Blame Nature

Mother Nature, of Gaia, the governing mind of planet Earth is not to blame for this problem of everything rotting or falling apart. The one who is really to blame is the false god that the Gnostics call the Demiurge. The true God created a world without rotting, decaying, or dying. But the false god created with imperfections, so his creation, the universe of matter, is flawed. When the Demiurge saw how his creation was corrupt, full of death and disease, and beings that must live by killing and eating other beings, he was shocked but had no way

to correct the problem. Only the real God can, and will, correct the error.

Don't Expect Permanency in Material Things

Aurelius is telling us that since the very nature of the realm of matter is change and change which is usually in the form of decay and destruction, we should not be surprised or angry when it happens. That is easy to say, but I know from personal experience that it is not easy to avoid getting angry or upset when a refrigerator stops working, a pet dies, or a tire only a few months old has a blowout. I must work to remind myself that such is the nature of the corrupt world of matter, as must all of us.

Another Way to Look at Change

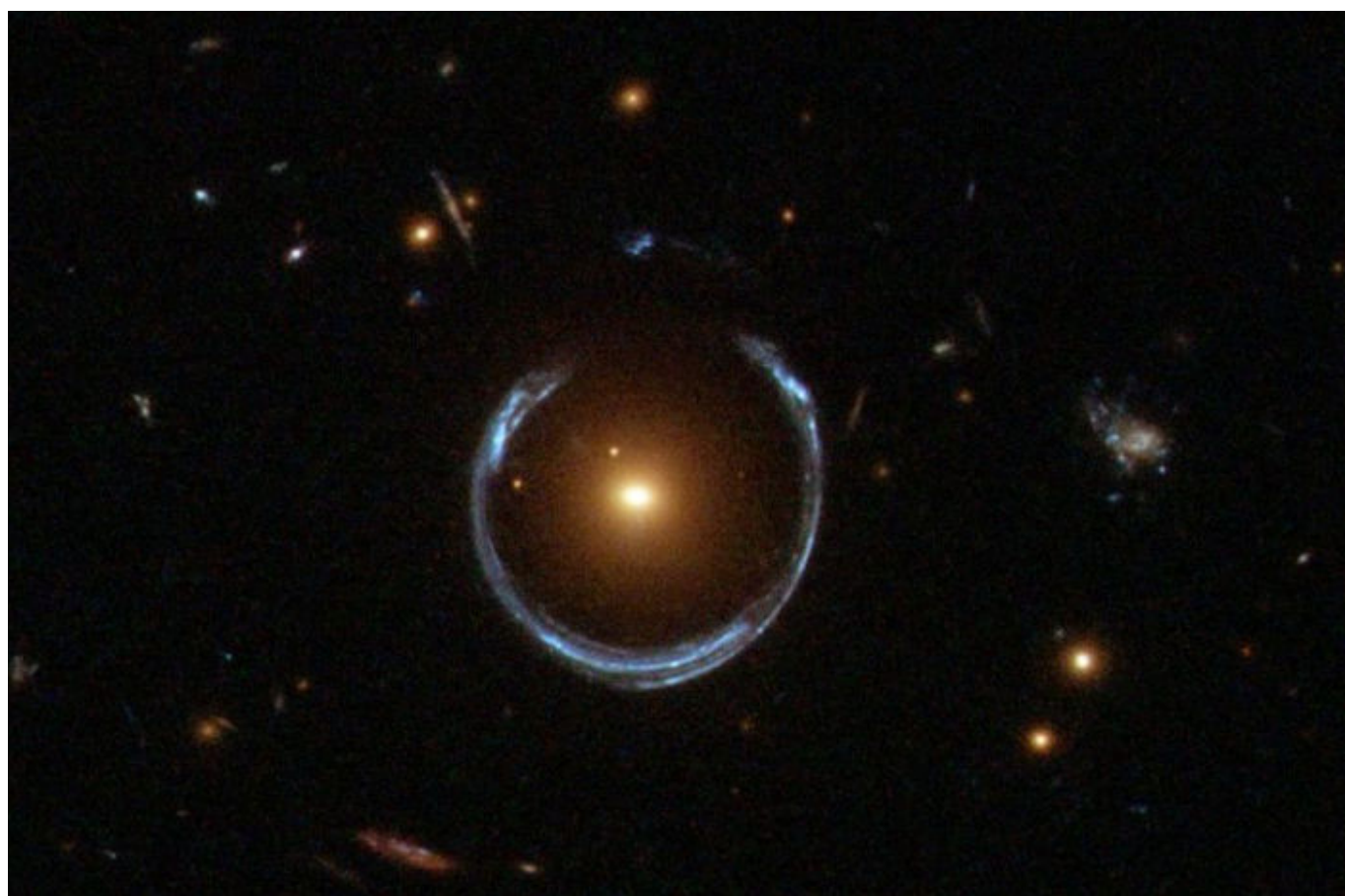
While it is true that change is almost always in the direction of decay, death, and destruction, we must remind ourselves that there is another side to it. All beings, all things, have a spirit, and spirits never die. While it is not true that all people go to Heaven simply because they have physically died, still, they all have an immortal spirit. When animals and plants die, their spirits usually enter another life form being born and therefore continue. Eventually, all spirits return to the Spiritual Realm where there is no death or decay, no illness, no pain. So when things are falling apart around you, remind yourself that you are only here temporarily, so don't let it get to you.

Solving the Problem

Just because everything decays here, doesn't mean there is nothing we can do about it. There are things we can do, and should. We can avoid littering and wasting. We can contribute to growth in the world by planting gardens or trees. We can adopt, or otherwise care for one or more animals. Most of all, we can try to keep ourselves physically and mentally healthy and slow down our personal decay and corruption. And we can

aid God in redeeming this realm of matter and returning it to the realm of spirit where there is no corruption.

“ESA/Hubble Picture of the Week Prompts New Understanding of Einstein Ring”



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

□□First theorized to exist by Einstein in his general theory of relativity, this object’s unusual shape can be explained by a process called [gravitational lensing](#), which causes light shining from far away to be bent and pulled by the gravity of an object between its source and the observer.

[Read the entire article here.](#)

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

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

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

[Read the entire article here.](#)

“Will Betelgeuse explode in ‘tens of years’?”



Betelgeuse is the nearest red supergiant star to Earth. Distance estimates vary, but it's probably within [1,000 light-years](#) ... a hop and a skip in galactic terms. Someday, Betelgeuse will explode as a supernova. Then it might become as bright as a [full](#) moon, possible visible in broad daylight! But *when* will Betelgeuse explode? The answer has been: *Maybe today. Maybe a thousand years from now.* But, since 2019, there's been a noticeable uptick in the brightening and dimming of Betelgeuse. And a new paper – [published](#) this week (June 1, 2023) – suggests not thousands of years but “tens of years” as the timescale for Betelgeuse's going supernova.

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

The Geothermal Rising Conference is Coming to Reno



Reno's Peppermill Resort

The 2023 Geothermal Rising Conference will be held in Reno, Nevada October 1st through October 4th with some pre-conference events starting on September 29th. The event will be held at the Peppermill Resort Spa Casino. A tour of our Steamboat Springs Healing Center & Spa will be offered to the group by Steamboat. Here are the details:

Steamboat Hot Springs Healing Center & Spa is Reno, Nevada's only mineral hot springs. A registered state historic landmark, the day spa features geothermal water for soaking

combined with the relaxation of a spa getaway. Considered a local treasure, Steamboat's famous natural volcanic waters are chock-full of rare, health-boosting minerals found nowhere else in North America. Guests have the option of soaking indoors in private spring-fed tubs with complimentary aromatherapy and color therapy options or can unwind in the outdoor geothermal hot tub. In addition to soaking, Steamboat Hot Springs offers guests an array of luxurious spa services, such as therapeutic massage treatments—including those using CBD oil—sauna, mud treatments, lymphatic stimulation, cupping and hot stone therapy, exfoliation scrubs, chakra alignment therapy, vibrational therapeutics and Naturopathic consultations, to highlight just a few items on their comprehensive spa menu.

Field Trip Schedule

- 9:30 AM – 12:00 PM
- 1:30 PM – 4:00 PM

The cost is \$125 per person and includes transportation to/from the hot springs, a tour of the facility, as well as the opportunity to take advantage of one of the soaking options listed above. Additional products and services would be at the expense of the participant.

Space is limited and pre-registration is required

About the 2023 GRC!

The GRC is the geothermal industry's flagship annual conference, reflecting the global nature of the geothermal industry and bringing together people in industry, academia, government, and the general public.

Conference Agenda

Date	Start Time	End Time	Event Name
09/29/23	8:00 AM		Lassen Field Trip Departure (<i>overnight Field Trip</i>)
09/30/23	8:00 AM	1:00 PM	Workshop Registration (<i>all workshops require separate registration</i>)
09/30/23	8:00 AM	5:00 PM	Workshop: Geothermal 2.0: New Technology and Ideas Helping to Scale Geothermal Developments
09/30/23	8:00 AM	5:00 PM	Workshop: Synergies with Other Renewable Energies to Accelerate Geothermal Project Development
09/30/23	8:00 AM	5:00 PM	Workshop: The Hunt for Superhot Geothermal
09/30/23	9:00 AM	12:00 PM	Field Trip: Ormat Steamboat Hills
09/30/23	12:00 PM	5:00 PM	Workshop: Purpose and Process of Underground Injection Control Permit Applications in Nevada
09/30/23	1:30 PM	4:30 PM	Field Trip: Ormat Steamboat Hills
09/30/23	6:00 PM	7:00 PM	Workshop Reception (<i>Workshop Participants & GR Board Members Only</i>)
10/01/23	6:45 AM	4:30 PM	Golf Tournament

Date	Start Time	End Time	Event Name
10/01/23	12:00 PM	8:00 PM	Registration
10/01/23	12:30 PM	3:30 PM	20-Minute Sponsor Hosted Technical Sessions
10/01/23	1:00 PM	2:00 PM	Peppermill Resort Direct Use Tour
10/01/23	3:00 PM	4:00 PM	Peppermill Resort Direct Use Tour
10/01/23	4:00 PM	6:00 PM	Geothermal 101
10/01/23	6:30 PM	8:30 PM	Opening Reception and Exhibit Hall
10/01/23	7:00 PM	8:00 PM	GR DEI Task Force 2024 Goal Setting Meet Up Poster Session
10/01/23	6:30 PM	8:30 PM	
10/01/23	8:30 PM	10:30 PM	GRC23 After Hours Networking Reception
10/02/23	6:00 AM	7:00 AM	Women in Geothermal (WING) Yoga
10/02/23	6:30 AM	7:30 PM	Registration
10/02/23	7:00 AM	8:00 AM	Breakfast
10/02/23	7:00 AM	6:00 PM	Speaker Ready Room
10/02/23	8:00 AM	10:00 AM	Opening Plenary Session
10/02/23	10:00 AM	10:30 AM	Break

Date	Start Time	End Time	Event Name
10/02/23	10:00 AM	10:30 AM	GR Student Members Icebreaker
10/02/23	10:00 AM	11:00 AM	Peppermill Resort Direct Use Tour
10/02/23	10:30 AM	12:30 PM	Plenary Session II
10/02/23	12:00 PM	1:00 PM	GR Student Committee Resume Building Workshop & Professional Headshots
10/02/23	12:30 PM	2:30 PM	Lunch in Exhibit Hall
10/02/23	12:30 PM	2:30 PM	Poster Session
10/02/23	12:30 PM	5:00 PM	Exhibit Hall Open
10/02/23	2:00 PM	4:00 PM	<u>How the Foundation for Energy Security and Innovation (FESI) Can Contribute to Accelerating Geothermal Power Innovation and Commercialization</u> Workshop is complimentary but pre-registration is required. Limited space available.
10/02/23	3:00 PM	4:00 PM	
			Peppermill Resort Direct Use Tour
10/02/23	3:00 PM	5:00 PM	<u>Panel Session 1A: Closed-Loop Geothermal at Scale: Demonstrations and Deployments</u>

Date	Start Time	End Time	Event Name
10/02/23	3:00 PM	5:00 PM	Concurrent Sessions
10/02/23	3:00 PM	5:00 PM	Panel Session 1G: Growth of Geothermal Energy Networks in the US and Throughout the World Monday Night Mixer (<i>included in full conference registration fee</i>)
10/02/23	7:00 PM	9:00 PM	
10/03/23	7:00 AM	7:00 PM	Registration
10/03/23	7:00 AM	6:00 PM	Speaker Ready Room
10/03/23	7:30 AM	9:30 AM	Plenary Session III
10/03/23	9:30 AM	10:00 AM	Break
10/03/23	9:30 AM	8:30 PM	Exhibit Hall Open
10/03/23	10:00 AM	11:00 AM	Peppermill Resort Direct Use Tour
10/03/23	10:00 AM	12:00 PM	Panel Session 2A: Geothermal Everywhere? The Role of Subsurface Characterization in Advancing Geothermal Technology
10/03/23	10:00 AM	12:00 PM	Concurrent Sessions

Date	Start Time	End Time	Event Name
10/03/23 10/03/23	10:00 AM 10:00 AM	12:00 PM 5:30 PM	Panel Session 2G: Translating Oil and Gas Industry Experience into Hot Geothermal Industry 20-Minute Sponsor Hosted Technical Sessions
10/03/23	12:00 PM	1:30 PM	Lunch in Exhibit Hall
10/03/23	12:00 PM	1:30 PM	Women in Geothermal (WING) Core Value Awards & Panel Session
10/03/23	2:00 PM	4:00 PM	Panel Session 3A: Do Non-Conventional Geothermal Developments Need a Specialized Legal Framework?
10/03/23	2:00 PM	4:00 PM	Concurrent Sessions
10/03/23	3:00 PM	4:00 PM	Peppermill Resort Direct Use Tour
10/03/23	4:00 PM	4:30 PM	Break
10/03/23	4:00 PM	4:30 PM	GR Mentor-Mentee Meetup
10/03/23	4:30 PM	6:30 PM	Panel Session 4A: Critical Minerals, Mineral Commodities, and Geothermal Systems: Past, Present, and Future
10/03/23	4:30 PM	6:30 PM	Concurrent Sessions

Date	Start Time	End Time	Event Name
10/03/23	6:30 PM	8:30 PM	Networking Reception in Exhibit Hall
10/03/23	6:30 PM	8:30 PM	Poster Session
10/03/23	7:00 PM	8:00 PM	GR Student Committee Trivia Contest
10/04/23	6:00 AM	7:00 AM	Women in Geothermal (WING) Fun Run/Walk
10/04/23	7:30 AM	12:00 PM	Registration & Information
10/04/23	7:30 AM	9:30 AM	Annual Meeting Meeting & Awards Breakfast
10/04/23	9:30 AM	10:00 AM	Break
10/04/23	9:30 AM	2:00 PM	Exhibit Hall Open
10/04/23	10:00 AM	11:00 AM	Peppermill Direct Use Tour PIVOT Panel Sessions Concurrent Sessions
10/04/23	10:00 AM	5:30 PM	
10/04/23	10:00 AM	12:00 PM	
10/04/23	12:00 PM	1:30 PM	Lunch in Exhibit Hall
10/04/23	1:30 PM	3:30 PM	Concurrent Sessions
10/04/23	3:30 PM	4:30 PM	Closing Networking Break
			<i>*Schedule is subject to change.</i>

One Wolf Bites the Other Wolf as they Both Follow a False Path



“The spirit of the stout beast is the hellish worm; the crowned bride that sits upon it is the false Woman (or Whore) Babel: She drinks only out of the cup of Whoredom and Abomination, her drink in that cup is the fierceness of the Anger of God of which the people drink, and become drunk, and

so in their drunkenness they become murderers, robbers, thieves, mockers, jesters, scorers, proud, high-minded, self-honorers, stern malicious people. There is no end to the number of those that hate one another; everyone supposes his way is right, and that he walks in the right path; if his brother and sister go not in the same way with him, he scorns them and calls them heretics, and so one Wolf bites another; his Way is in his own opinion, as his Master teaches him, who yet never regrets anything. Thus one hypocrite deceives the other, and they are scorers and prosecutors one of another among themselves and one is a Wolf as much as another; and the poor Able who stands in true resignation, and relies upon God) must continually be their footstool, and is continually murdered in a twofold manner.

“One is that he is deceived [by the Wolfs], and goes along into Babel, and is murdered, as to the Kingdom of Heaven. The other is that, if he remains constant, then the Devil (with Cain) will not endure him, but murders him outwardly, as to the body, or takes away his good name and credit, and covers him so that he may not be known, that so the Kingdom of Cain and the Antichrist may remain in Babel of which we know well by our own experience. But it fares well with our Abel, and our being scorned springs up in the Blossom of the lily, whereat we will rejoice when we return from Jerico to Jerusalem and to our Father. ~Jacob Boehme

The Hellish Worm



Calling the spirit of The Beast a Hellish Worm is an interesting way to put it. I think in Boehme's day, worms were thought of as filthy creatures because they lived in dirt. Many early descriptions of dragons refer to those beasts as great worms rather than giant lizards as they are generally depicted today. The addition of the "crowned bride" who is the whore of Babel is a new addition to the tail. First, it tells us that this is no ordinary garden worm, but one of great size like a dragon. But why is a woman wearing a crown riding it? I think the idea is that she is a very vain woman, that is why she wears a crown, one she has probably awarded herself. She drinks from the cup of abomination and becomes "drunk" on the lies of the dark beings and forces who supply that allegorical drink.

Anger of God of Which the People Drink

Sadly, the woman on the hellish worm is not alone in drinking from the cup of abomination, allegorically speaking, of course. Many people drink from that cup regularly, while others drink it only occasionally. There are very few who never drink from that cup. Drinking from this cup often makes people angry with God, because God doesn't do what they want him to, as if God was their servant and not the other way around. Others lose all belief in God because God doesn't answer their prayers. They don't understand that God is all about the spiritual and answers spiritual prayers, but not materialistic ones.

Wolf Bites Wolf

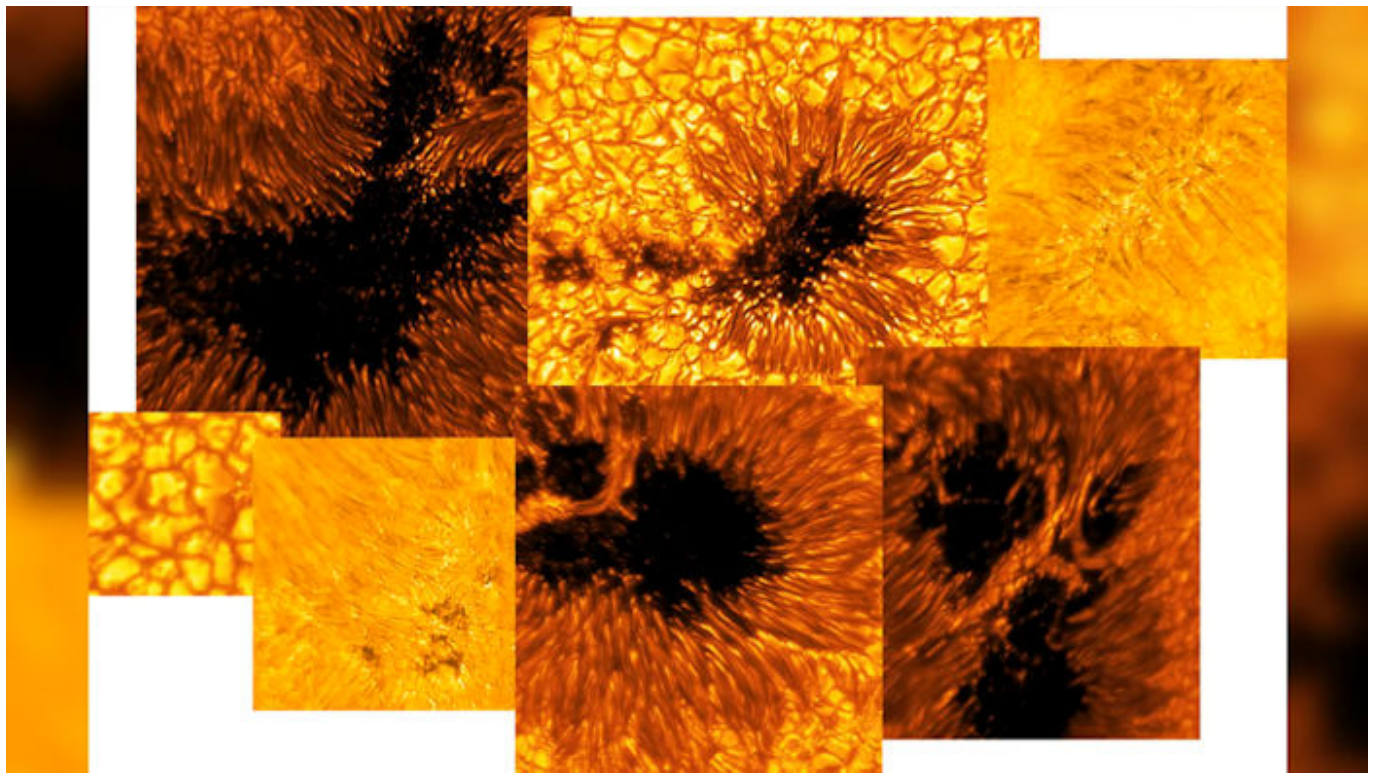
Because those who drink from the cup of abomination usually think that their path of religion or spirituality is the one true path, for no particular reason except that it is the path they have chosen, they often argue, fight, and even wage war against those whose beliefs are different. They don't realize that the ones they are fighting are also ones who drink from that cup, so it is a case of a wolf fighting another wolf.

The Poor Able

Here Boehme is using Cane and Able as examples of good and bad people, with Able representing the good ones who believe in God and who practice spiritual development as Jesus taught the apostles to do. Cane represents those wolves who have lost The Way and are either making no effort to find it, but embracing materialism instead, or they are clinging to a false path as taught by a materialistic church that has lost its way.

If you think war is a good thing, if you think some people should be hated because of their religion or nationality, if you think some people are better than others, you are one of the wolves, one of the tribe of Cain. Hopefully, more of us will awaken and turn to the truth of the tribe of Able.

“Solar telescope’s images reveal the sun’s surface like never before | CNN”



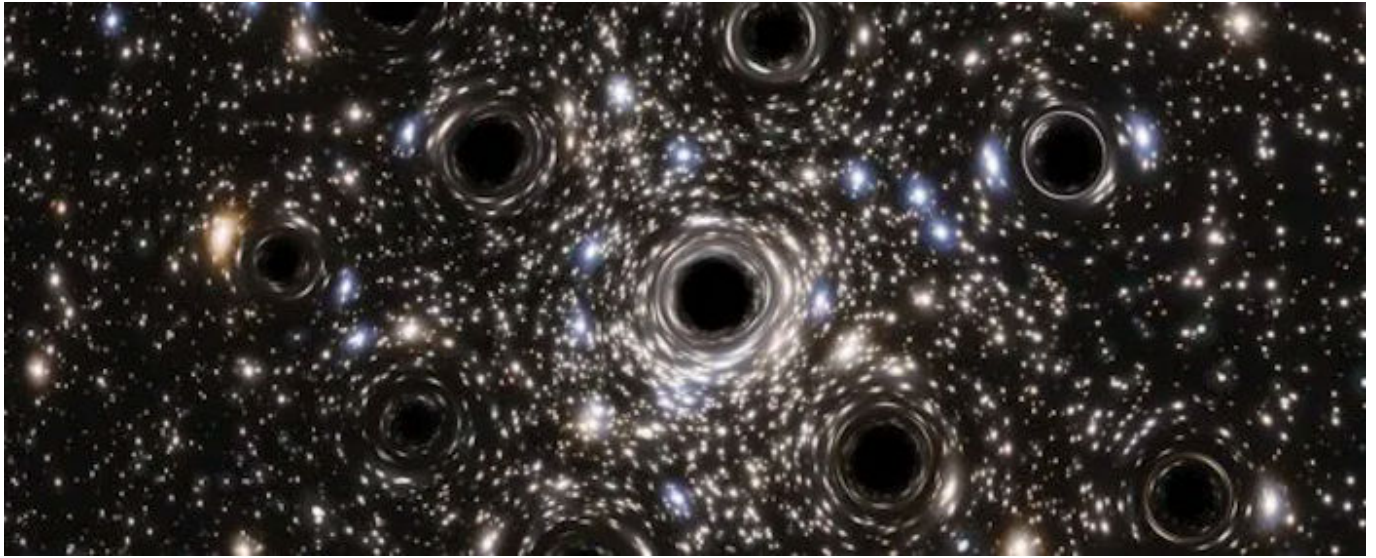
New images of the sun's surface captured by a powerful ground-based solar telescope have revealed sunspots and other features in unprecedented detail.

The eight images, [released on May 19](#), were taken using the National Science Foundation's [Daniel K. Inouye Solar Telescope](#), a 4-meter (13.1-foot) telescope located on the island of Maui in Hawaii.

Although the [sun is becoming increasingly active](#) as the July 2025 solar maximum – the peak of the sun's 11-year cycle – draws closer, the photos showcase the quieter aspects of the solar surface.

[Read the entire article here.](#)

“A group of black holes has been observed moving across the entire Milky Way.”



A fluffy cluster of stars spilling across the sky may have a secret hidden in its heart: a swarm of over 100 stellar-mass black holes.

If this finding can be validated, it will explain how the cluster came to be the way it is – with its stars spaced light-years apart, smearing out into a stellar stream stretching across 30,000 light-years.

[Read the full article here](#)