

Society News

Please note my new contact address and phone number over there on the right.

VAS Anniversary

Celebrating
40 *Years*

The Society was formed in 1976 which makes this year our 40th. At a recent Committee meeting it was suggested that we might hold an event later in the year, probably in November to celebrate this anniversary. More details in next month's edition but if you are interested in attending, please contact a member of the Committee.

Physics Event

VAS have been invited to Cowes Enterprise College for a Physics Day on Tuesday 5th July. They are expecting visits from most of the Island's schools and hope we can provide an insight to astronomy.

We would have an exhibition stand and need some volunteers to help for the day. If you can help for an hour or two please drop me an email.

Light Pollution Petition

There is a UK government petition taking place to introduce legislation to regulate light pollution.

The petition runs until 22nd July and needs at least 10,000 signatures before the government will officially respond (at the time of writing they have about a third of that number). I would encourage all members to sign this and to also pass this information on to others. Please note that other family members within a household can sign too.

<https://petition.parliament.uk/petitions/119428>

Brian Curd
Editor New Zenith.

VAS Website: wightastronomy.org

Submissions or letters to New Zenith are always welcome and should be sent to:

The Editor New Zenith
Carpenter's Cottage
Dennett Road
Bembridge
Isle of Wight PO35 5QF

Tel: **01983 872875** or email: editor@wightastronomy.org

Material for the next issue by the 6th of the month please.

The Vectis Astronomical Society and the Editor of the New Zenith accept no responsibility for advice, information or opinion expressed by contributors.

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Observatory Diary

Monday, 19.30hrs	Members Only and by arrangement Telescope and night sky training. Please contact Martyn Weaver 07855 116490
Thursday, 19.30hrs	Members and Public. Informal meeting and observing

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2016 Monthly Meetings

Date	Subject	Speaker
Please check wightastronomy.org/meetings/ for the latest information		
27 May	Introduction to Radio Astronomy	Dudley Johnson
24 Jun	Solar Sails and How They Might be Used	Dr Thomas Waters
22 Jul	Ultra High-Energy Cosmic Rays	Ellis Owen
26 Aug	AGM Starts at 7pm sharp William Herschel and the Rings of Uranus	Dr Stuart Eves
23 Sep	TBC	TBC
28 Oct	Radiation Protection in Space (for manned missions)	Dr Elizabeth Cunningham
25 Nov	Stellar population Modelling	Dr Claudia Maraston

Observatory Visits Booked

None booked this month

It would be appreciated if members could avoid using the observatory at these times.

*My PIN
is the last
4 digits of
 π*

VAS Contacts 2014/15

President	Barry Bates president@wightastronomy.org
Chairman	Bryn Davis chairman@wightastronomy.org
Secretary	Richard Flux secretary@wightastronomy.org
Treasurer	Simon Plumley treasurer@wightastronomy.org
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NZ Editor	Brian Curd editor@wightastronomy.org
Membership Secretary	Norman Osborn members@wightastronomy.org
NZ Distribution	Brian Bond distribution@wightastronomy.org
Others	Mark Williams & Nigel Lee

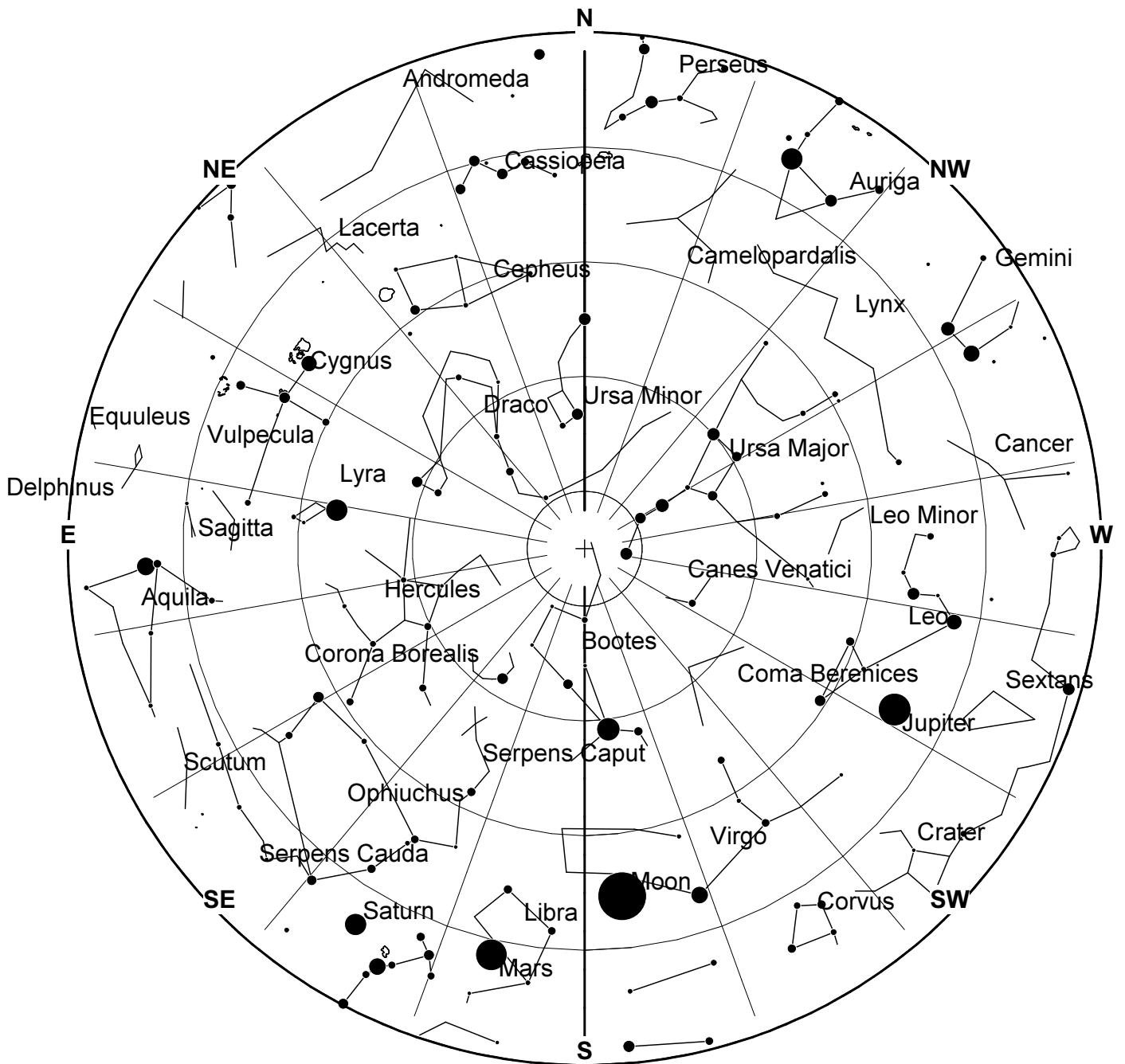
Important

Members using the observatory outside normal Thursday meetings **MUST** enter a line or two in the Observatory Log Book.

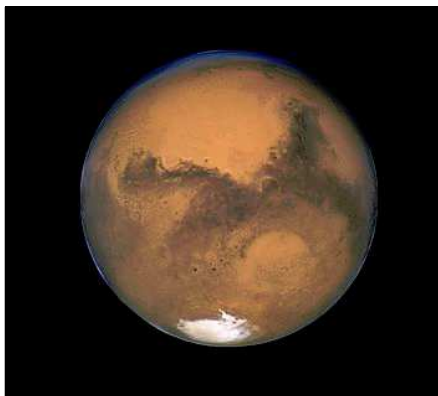
On several occasions, lights, heaters and the Meade LX200 have been left on!

When leaving, please ensure all is secure and all lights, heaters and telescopes are **TURNED OFF**.

June 2016 Sky Map



View from Newchurch Isle of Wight UK - 2200hrs - 15 June 2016







Mars is the fourth planet from the Sun and the second-smallest planet in the Solar System, after Mercury. Named after the Roman god of war, it is often referred to as the “Red Planet” because the iron oxide prevalent on its surface gives it a reddish appearance. Mars is a terrestrial planet with a thin atmosphere, having surface features reminiscent both of the impact craters of the Moon and the valleys, deserts, and polar ice caps of Earth.

The rotational period and seasonal cycles of Mars are likewise similar to those of Earth, as is the tilt that produces the seasons. Mars is the site of Olympus Mons, the largest volcano and second-highest known mountain in the Solar System, and of Valles Marineris, one of the largest canyons in the Solar System. The smooth Borealis basin in the northern hemisphere covers 40% of the planet and may be a giant impact feature. Mars has two moons, Phobos and Deimos, which are small and irregularly shaped.

This article is licensed under the [GNU Free Documentation License](https://www.gnu.org/licenses/fdl.html). It uses material from the Wikipedia article “Mars”.

June 2016 Night Sky

Moon Phases

New	First Qtr	Full	Last Qtr
			
5th	12th	20th	27th

Planets

Mercury

Mercury makes a very poor apparition in the morning sky this month. While it rises about an hour before sunrise it is only about 10° higher than the sun at best making it very difficult to spot against the bright pre dawn sky.

Venus

Venus is too close to the sun to be visible. It starts its rather poor evening apparition this month and should be visible low in the south west after sunset next month.

Mars

Once the sky is dark enough for observation the 'Red Planet' can be found low in the south eastern sky. At best it only gets to about 18° above the horizon; this will be at about 11pm at mid month. It is the brightest object in that part of the sky, this and its distinct red colour make Mars easily identifiable. Now is not too late for telescopic observation, but its size and the ease with which the surface markings can be seen will be decreasing noticeably by the end of the month.

Jupiter

As the sky darkens after sunset, Jupiter becomes visible in the southwest. With the late onset of darkness at this time of year the time available for observation before the planet gets too low down will be limited.

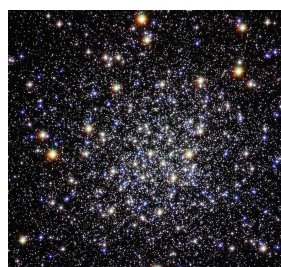
Saturn

Like Mars, Saturn is observable from the time the sky is dark enough. It is a few degrees further east than Mars, but is still at a similarly low altitude and subject to severe atmospheric turbulence.

Uranus & Neptune

Both outer planets are lost in the glare of the sun and will not return to our skies until later in the year.

Deep Sky



M12 Globular Cluster
RA16h 47' Dec -1° 57'
mag 8.0

M12 is located in the centre of the constellation of Ophiuchus a rather large constellation next to the summer Milky way who's outline is made up from 2nd and 3rd magnitude stars.

In most clusters the smaller stars are those with the greatest numbers, they live longer and outlast the larger members that either explode as supernovae or become white dwarves at the end of their lives. M12 appears to have a surplus of large stars and it is thought that it has lost it's smaller members through interactions with the Milky way and by the time the Sun comes to the end of it's life this globular will have been completely shredded.



M10 Globular Cluster
RA16h 58m Dec -4°7'
mag 7.5

Just 3° south and east of M12 is another classic globular cluster, slightly brighter with a condensed core covered in what appears to be a dusting of sugar.

This ball of stars is just over 14,000 light years away is 2,000 light years closer than M12 but still racing away from us by almost 70km every second.



M5 Globular Cluster
RA15h 19' Dec 2° 5'
mag 5.6

This globular cluster contains what are believed to be some of the oldest stars in the universe at about 13 billion years old.

To find this group of old timers look the width of a good hand span from the bright yellow star Arcturus towards the red Antares. It is in an area of sky rather devoid of bright guide stars but can be picked out in binoculars as a fuzzy star. Although Messier was certain that the nebula Contained no stars any reasonably good modern telescope should be able to resolve about 200 stars surrounding the tightly packed core.

Peter Burgess

Lucy Rogers - BlackgangPi

Lucy is running a free event at Blackgang Chine for all Raspberry Pi users:

Bring your Pi Projects along to show and discuss with other Pi enthusiasts, and also speak with the Blackgang and Robin Hill staff about how they use Pi's in the Park.

The event is free but DOES NOT give you access to the Theme Park.

- Self-guided workshops available, but no training.
- Please register so we know how many to expect.
- Under 16's please bring an adult with you.

WHEN: Sun, 5 June 2016 from 10:30 to 13:30 (BST)

WHERE: Ship Ashore Tea Room, Blackgang Chine, PO38 2HN

Register at <https://www.eventbrite.co.uk/>

What is Raspberry Pi?

The Raspberry Pi is a series of credit card-sized single-board computers developed in the United Kingdom by the Raspberry Pi Foundation with the intent to promote the teaching of basic computer science in schools and developing countries.



These are functional computers for around £30 just connect a mouse, keyboard and a monitor and play.

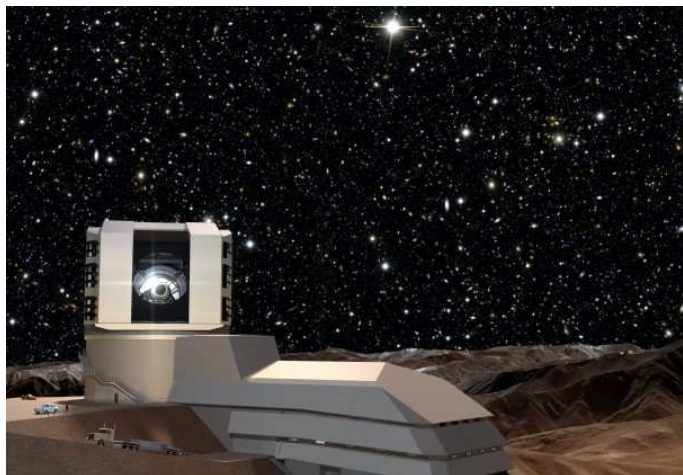
There are loads of websites dedicated to the Pi but a good place to start is <https://www.raspberrypi.org/>

Wordsearch

E	O	S	O	E	L	O	H	K	C	A	L	B	T
S	P	R	S	E	R	E	T	I	P	U	J	E	N
R	D	A	U	N	G	P	X	G	P	B	A	T	A
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O	L	E	O	S	A	M	E	T	E	O	R	J	N

NEPTUNE
SUN
GALAXY
PLUTO
ASTEROID
SUPERGIANT
JUPITER
NEBULA
ERIS
MERCURY
BLACK HOLE
WHITE DWARF
MOON
ORION
LEO
COMET
VENUS
EARTH
METEOR
MARS

Scientific telescope aims to be a blockbuster



The world's astronomers – including scientists from the OU – are creating a telescope which they hope will uncover the mysteries of space. The Large Synoptic Survey Telescope (LSST) will be the world's largest digital camera and is expected to capture the biggest and best images from the universe for all to see.

The OU is among a select group of UK contributors recently announced for this international astronomy project, thanks to confirmation of funding from the Science and Technology Facilities Council.

Steven Kahn, the LSST Director said: "LSST will be one of the foremost astronomy projects in the next decades and the UK astronomical community will contribute strongly to its success."

The telescope is being built in the Chilean Andes to take advantage of the dry conditions which make it ideal for observing.

When it starts operating, the LSST is expected to generate one of the largest scientific datasets in the world. Among the treasures it could reveal are the definitions of dark matter and dark energy.

Project Scientist, Sarah Bridle from the University of Manchester said:

"LSST will build up a very detailed map of billions of galaxies, with approximate distances to each, from which we will learn about the mysterious dark energy that seems to be accelerating the expansion of the Universe."

More info and links: <http://ounews.co/science-mct/expect-good-view-scientific-telescope-promises-showstopper/>

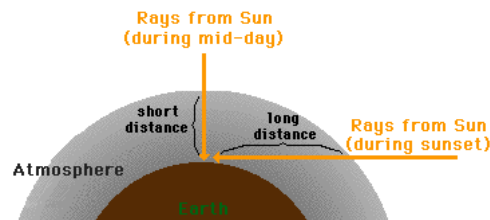
SILLY QUESTIONS?

WE ALL KNOW THAT THERE'S NO SUCH THING AS A SILLY QUESTION BUT.....



Why does the sun look red when it sets?

We know that our earth is surrounded by the blanket of air called atmosphere. Sunlight passes through the atmosphere before it reaches us. We also know that sun light is composed of seven colours - Red, Orange, Yellow, Green, Blue, Indigo and Violet.



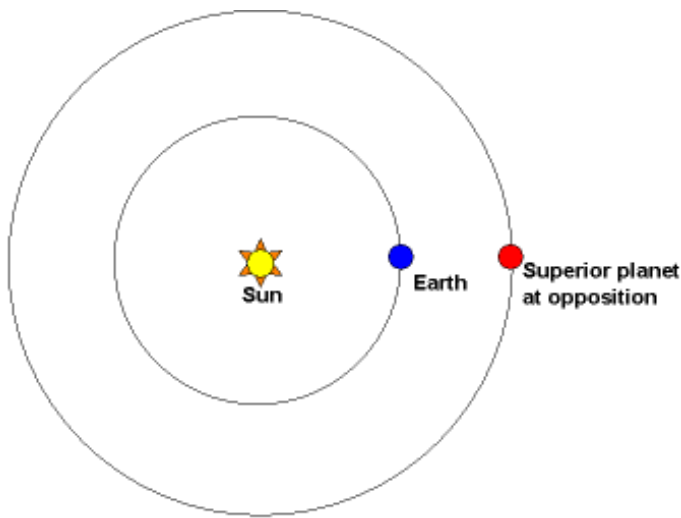
In the mornings and evenings, when the sun is near the horizon, the rays have to travel a path about fifty times longer in the atmosphere to reach us than it does in the noon. The dust, smoke and water vapour present in the atmosphere scatter away these colours differently. Violet, Indigo and Blue are scattered the most and Red and Orange the least.

That is why most of these two colours reach our eyes. As a result, the rising and setting sun appears red.

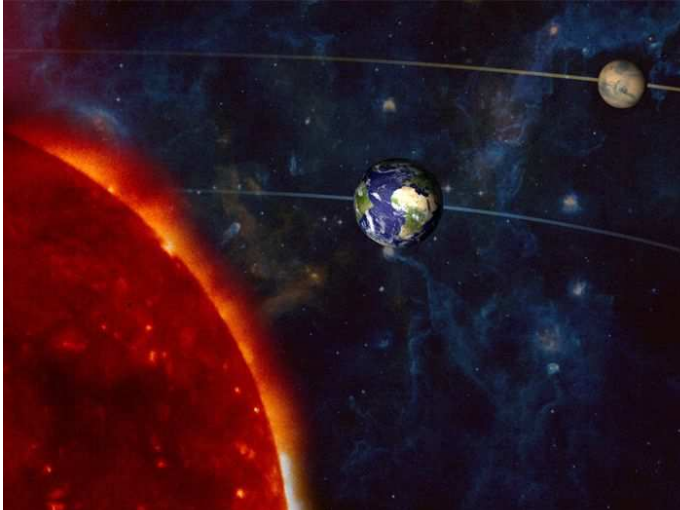
What about "Red sky at night, shepherd's delight; red sky in the morning, shepherd's warning." Any scientific truth to that?

Well yes, as Red at night tells you there's high pressure off to the West that's likely to be over you tomorrow. While Red in the morning is due to the high pressure weather system having already moved East meaning the good weather has passed, most likely making way for a wet and windy low pressure system.

Opposition and Conjunction



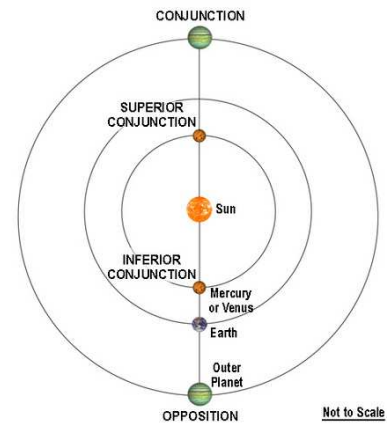
In positional astronomy, two celestial bodies are said to be in opposition when they are on opposite sides of the sky, viewed from a given place (usually Earth). Opposition occurs only in superior planets (see the diagram). The Moon, which orbits Earth rather than the Sun, is said to be in opposition to the Sun at full moon; the Earth is then approximately between them. A superior planet (one with an orbit farther from the Sun than Earth's) is in opposition when Earth passes between it and the Sun.



The opposition of a planet is a good time to observe it, because the planet is then at its nearest point to the Earth and in its full phase. The planets Venus and Mercury, whose orbits are smaller than Earth's, can never be in opposition to the Sun.

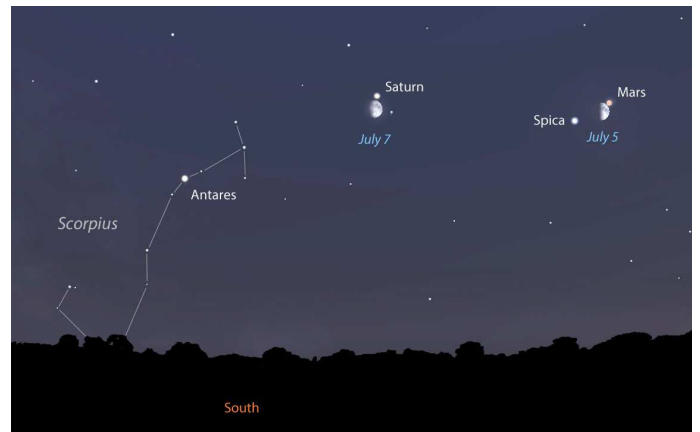
A conjunction is the apparent meeting or close approach of any two objects in the sky. This does not mean that they are physically close in space, merely that they appear along the same line of sight. One object may be vastly further away, and indeed this is usually the case.

The Moon is in conjunction with the Sun at the phase of New Moon, when it moves between the Earth and Sun and the side turned toward the Earth is dark. Inferior planets—those with orbits smaller than the Earth's (Venus and Mercury)—have two kinds of conjunctions with the Sun.



An inferior conjunction occurs when the planet passes approximately between Earth and Sun; if it passes exactly between them, moving across the Sun's face as seen from Earth, it is said to be in transit.

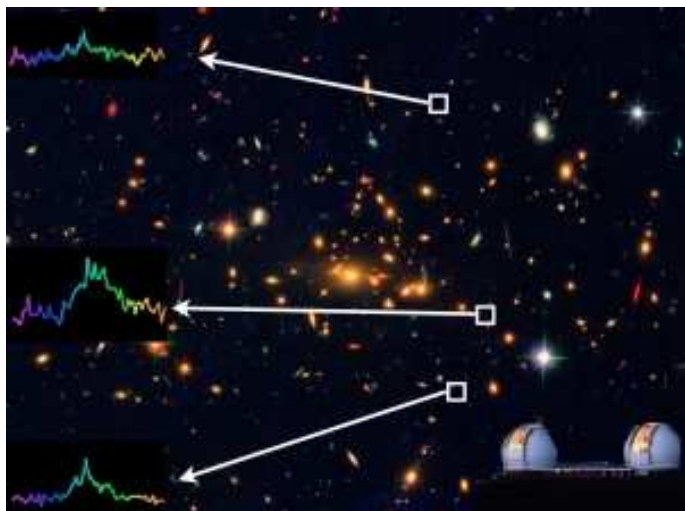
A superior conjunction occurs when Earth and the other planet are on opposite sides of the Sun, but all three bodies are again nearly in a straight line. Superior planets, those having orbits larger than the Earth's, can have only superior conjunctions with the Sun.



In this image Saturn and Mars are said to be in conjunction. This event can be defined when using either an equatorial or an ecliptic celestial coordinate system, in which any two astronomical objects (e.g. asteroids, moons, planets, stars) have the same celestial longitude, normally as when observed from the Earth (geocentric).

Elaine Spear

Faintest Early-Universe Galaxy Ever, Detected and Confirmed



MAUNAKEA, Hawaii – *An international team of scientists has detected and confirmed the faintest early-Universe galaxy ever using the W. M. Keck Observatory on the summit on Maunakea, Hawaii. In addition to using the world’s most powerful telescope, the team relied on gravitational lensing to see the incredibly faint object born just after the Big Bang. The results are being published in *The Astrophysical Journal Letters* today.*

The team detected the galaxy as it was 13 billion years ago, or when the Universe was a toddler on a cosmic time scale.

The detection was made using the DEIMOS instrument fitted on the ten-meter Keck II telescope, and was made possible through a phenomenon predicted by Einstein in which an object is magnified by the gravity of another object that is between it and the viewer. In this case, the detected galaxy was behind the galaxy cluster MACS2129.4-0741, which is massive enough to create three different images of the object.

“Keck Observatory’s telescopes are simply the best in the world for this work,” said Marusa Bradac, a professor at University of California, Davis who led the team. “Their power, paired with the gravitational force of a massive cluster of galaxies, allows us to truly see where no human has seen before.”

“Because you see three of them and the characteristics are exactly the same, that means it was lensed,” said Marc Kassis, staff astronomer at Keck Observatory who assists the discovery team at night. “The other thing that is particularly interesting is that it is small. The only way they would have seen it is through lensing. This allowed them to identify it as an ordinary galaxy near the edge of the visible Universe.”

“If the light from this galaxy was not magnified by factors of 11, five and two, we would not have been able to see it,” said Kuang-Han Huang, a team member from UC Davis and the lead author of the paper. “It lies near the end of the reionization epoch, during which most of the hydrogen gas between galaxies transitioned from being mostly neutral to being mostly ionized (and lit up the stars for the first time). That shows how gravitational lensing is important for understanding the faint galaxy population that dominates the reionization photon production.”

The galaxy’s magnified images were originally seen separately in both Keck Observatory and Hubble Space Telescope data. The team collected and combined all the Keck Observatory/DEIMOS spectra from all three images, confirming they were the same and that this is a triply-lensed system.

“We now have good constraints on when the reionization process ends – at redshift around 6 or 12.5 billion years ago – but we don’t yet know a lot of details about how it happened,” Huang said. “The galaxy detected in our work is likely a member of the faint galaxy population that drives the reionization process.”

“This galaxy is exciting because the team infers a very low stellar mass, or only one percent of one percent of the Milky Way galaxy,” Kassis said. “It’s a very, very small galaxy and at such a great distance, it’s a clue in answering one of the fundamental questions astronomy is trying to understand: What is causing the hydrogen gas at the very beginning of the Universe to go from neutral to ionized about 13 billion years ago. That’s when stars turned on and matter became more complex.”

The core of the team consisted of Bradac, Huang, Brian Lemaux, and Austin Hoag of UC Davis who are most directly involved with spectroscopic observation and data reduction of galaxies at redshift above seven. Keck Observatory astronomers Luca Rizzi and Carlos Alvarez were instrumental in helping the team collect the DEIMOS data. Tommaso Treu from University of California, Los Angeles and Kasper Schmidt of Leibniz Institute for Astrophysics Potsdam were also part of the team. They lead the effort that obtains and analyzes spectroscopic data from the WFC3/IR grism on Hubble.

The W. M. Keck Observatory operates the largest, most scientifically productive telescopes on Earth. The two, 10-meter optical/infrared telescopes near the summit of Maunakea on the Island of Hawaii feature a suite of advanced instruments including imagers, multi-object spectrographs, high-resolution spectrographs, integral-field spectrographs and world-leading laser guide star adaptive optics systems.

More at: <http://www.keckobservatory.org/>

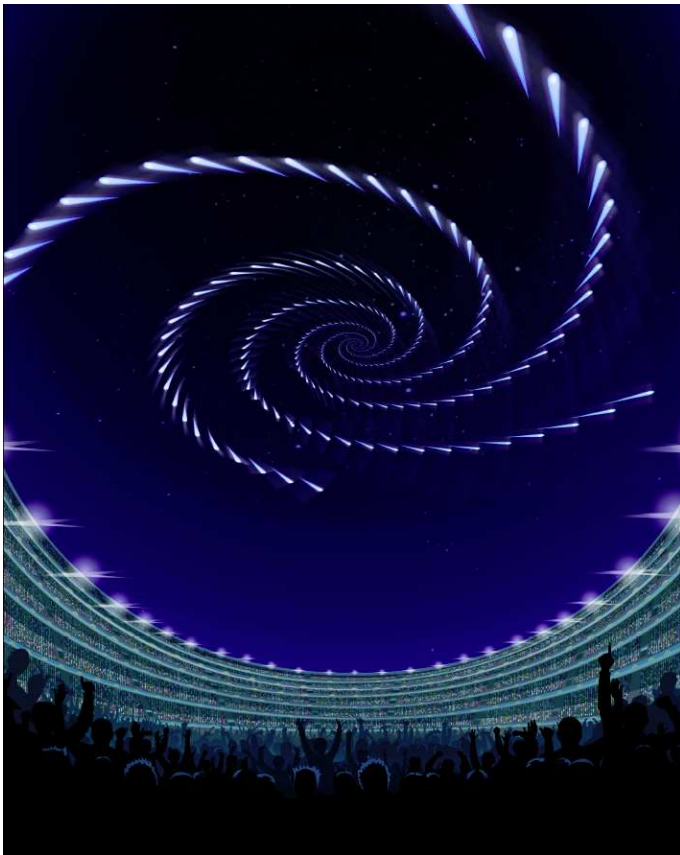
Man-made meteor shower for 2020 Olympics!

A news item popped up on my iPad the other day - "Japanese startup seeks to create artificial meteor shower".

Reading further I discovered a company called Ale Co. Ltd with a website at <http://global.star-ale.com/>, they proudly describe their business as "**Entertainment utilizing outer space, artificial shooting stars, satellites**".

Star-ALE wants to create its Olympic show in more or less the same manner that natural showers occur. The Sky Canvas is designed around a satellite filled with hundreds of "source particles" that the company says will "become ingredients for a shooting star." The particles would be launched around the world from the spacecraft before entering the atmosphere and beginning to burn at a height of around 40 to 50 miles.

Future Plans



Star-ALE intend Drawing Pictures and Displaying Words - When the service is initially offered, there will be limitations on locations of the shooting stars. However, we plan to launch multiple satellites in orbit. With multiple satellites, shooting stars can be freely created in different directions and locations.

Star ALE objectives

- To Become an Entertainment Company Utilizing Outer Space
- To provide a new kind of magical experiences throughout the world by creating shooting stars in the night sky
- In addition to the shooting star project, we will explore more new age entertainment utilizing outer space. We will research technologies necessary to expand our business, developing and applying useful new technologies.

Impact?

I was horrified when I read the website. Light pollution on such a scale should never be allowed and I hope the company behind this plan fail and disappear without trace.

How can a bunch of qualified astronomers and engineers think this a good idea?

"These shooting stars that are born through science function as a high-profit entertainment business, and the resulting funds will serve to further advance fundamental scientific research."

Star-ALE intend to develop a system to write and draw in the sky and make a profit from it. Apparently the profit (or some of it) will be poured into the Japanese economy to encourage science and research, yeah right!

As soon as a working system is developed, astronomers can kiss goodbye to ever seeing the natural sky again.



Star-ALE call the system **Sky Canvas** which I think sums up their intention well. They see the night sky as theirs to destroy.

I have emailed Star-ALE outlining my objections to the project but honestly don't expect a reply.

Brian Curd

Hollow Earth Theory

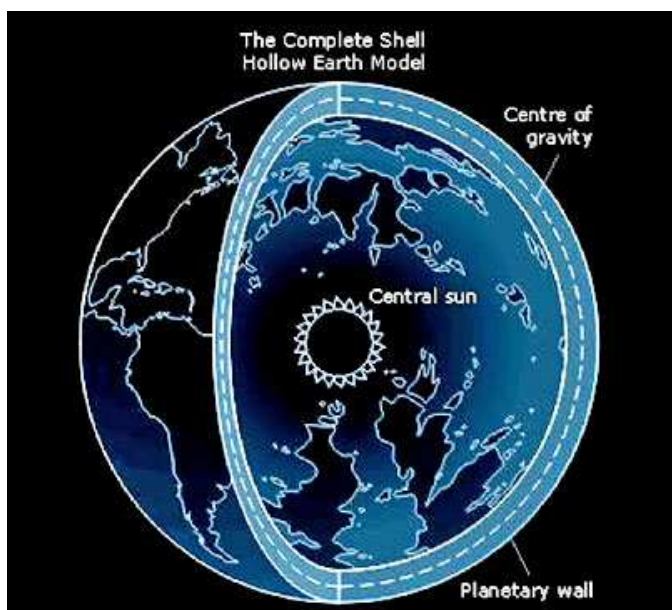


Conspiracy theorists claim to have stumbled upon NASA images that prove the controversial Hollow Earth theory. The Hollow Earth theory claims that the Earth is hollow and consists of an “inner Earth” populated by people and animals.

The inner Earth, according to Hollow Earth theorists, has a Sun and a technologically advanced civilization.

Hollow Earth conspiracy theorists claim there is a hole at the North Pole, as well as at the South Pole, through which the inner Earth can be accessed.

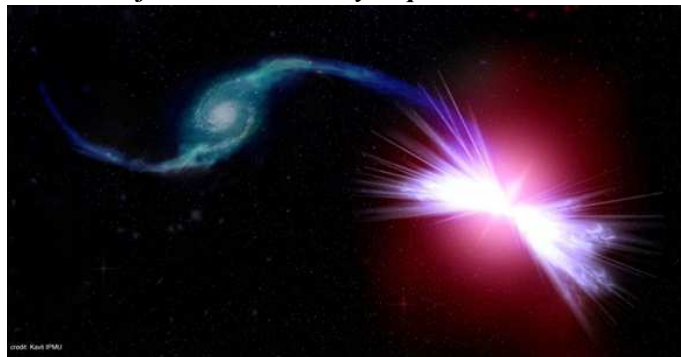
Conspiracy theorists also claim that the government and NASA are aware of the presence of a gaping black hole at the poles, but have tried to cover up the evidence by obscuring the hole in satellite images of the poles. Thus, most satellite images of the North Pole have a “dark zone or blackout region where no information is available.”



Read a lot more at: <http://www.inquisitr.com/>

Supermassive black holes cause galactic-scale warming

“Red geyser” galaxies point to a late stage for galaxies where star formation is nearly impossible.



An artist's rendition of the galaxies Akira (right) and Tetsuo (left) in action. Akira's gravity pulls Tetsuo's gas into its central supermassive black hole, fueling winds that have the power to heat Akira's gas. Because of the action of the black hole winds, Tetsuo's donated gas is rendered inert, preventing a new cycle of star formation in Akira.

Kavli IPMU

For most of their lives, galaxies are lush environments for turning gas into stars. Until they aren't.

Over the last few billion years, a mysterious kind of “galactic warming” has turned huge numbers of galaxies into deserts devoid of fresh young stars. The puzzle for astronomers has been identifying the unknown process that keeps the gas in these dormant galaxies too hot and energetic to form stars.

Today, astronomers from the Sloan Digital Sky Survey (SDSS) are announcing the discovery of a new class of galaxies called “red geysers” that harbor supermassive black holes with winds that have the power to keep dormant galaxies quiet.

“We knew that there had to be a way to prevent star formation in these galaxies, and now we have a good idea of what it is,” said Edmond Cheung, the lead author of the study. Cheung, an astronomer at the University of Tokyo's Kavli Institute for the Physics and Mathematics of the Universe, was working with an international team of astronomers studying hundreds of galaxies when they caught a supermassive black hole blasting away at the cold gas in its host galaxy.

“Galaxies start out as star-making machines with a simple recipe: gas plus gravity equals stars,” said Kevin Bundy, co-author on the study. “Here we have a galaxy that has everything it needs to form new stars, but is dormant. Why is that?”

Read more at: <http://astronomy.com/>

A Beautiful Instance of Stellar Ornamentation

In this image from ESO's Very Large Telescope (VLT), light from blazing blue stars energises the gas left over from the stars' recent formation. The result is a strikingly colourful emission nebula, called LHA 120-N55, in which the stars are adorned with a mantle of glowing gas. Astronomers study these beautiful displays to learn about the conditions in places where new stars develop.

LHA 120-N55, or N55 as it is usually known, is a glowing gas cloud in the Large Magellanic Cloud (LMC), a satellite galaxy of the Milky Way located about 163 000 light-years away. N55 is situated inside a supergiant shell, or superbubble called LMC 4. Superbubbles, often hundreds of light-years across, are formed when the fierce winds from newly formed stars and shockwaves from supernova explosions work in tandem to blow away most of the gas and dust that originally surrounded them and create huge bubble-shaped cavities.



The material that became N55, however, managed to survive as a small remnant pocket of gas and dust. It is now a standalone nebula inside the superbubble and a grouping of brilliant blue and white stars — known as LH 72 — also managed to form hundreds of millions of years after the events that originally blew up the superbubble. The LH 72 stars are only a few million years old, so they did not play a role in emptying the space around N55. The stars instead represent a second round of stellar birth in the region.

The recent rise of a new population of stars also explains the evocative colours surrounding the stars in this image. The intense light from the powerful, blue–white stars is stripping nearby hydrogen atoms in N55 of their electrons, causing the gas to glow in a characteristic pinkish colour in visible light. Astronomers recognise this telltale signature of glowing hydrogen gas throughout galaxies as a hallmark of fresh star birth.

While things seem quiet in the star-forming region of N55 for now, major changes lie ahead. Several million years hence, some of the massive and brilliant stars in the LH 72 association will themselves go supernova, scattering N55's contents. In effect, a bubble will be blown within a superbubble, and the cycle of starry ends and beginnings will carry on in this close neighbour of our home galaxy.

This new image was acquired using the FOcal Reducer and low dispersion Spectrograph (FOR2) instrument attached to ESO's VLT. It was taken as part of the ESO Cosmic Gems programme, an outreach initiative to produce images of interesting, intriguing or visually attractive objects using ESO telescopes for the purposes of education and public outreach. The programme makes use of telescope time that cannot be used for science observations. All data collected may also be suitable for scientific purposes, and are made available to astronomers through ESO's science archive.

More images and links to more information: <http://www.eso.org/public/news/eso1616/>

THE BACK PAGE

LINKS, COMMENTS AND OBSERVATIONS

Pavilion Building Work

The Pavilion update is fully underway and the area is now a "building site"

Anyone visiting the observatory must use a torch to ensure their own safety

The paths to the observatory are fenced off and cannot be used

Please be very careful when visiting the observatory in the dark!

**THE ROBERT HOOKE SOCIETY
FRESHWATER, ISLE OF WIGHT**

Hookefest2016

A WEEK LONG FESTIVAL

CELEBRATING

the life and work of Dr. Robert Hooke F.R.S.

OUR ISLAND'S GENIUS SON & ENGLAND'S "LEONARDO"

**Monday 18th to Sunday 24th July 2016
at various venues in West Wight**

Talks, Demonstrations, Exhibitions, Walks,
17th Cent. Concert, Floral Exhibition and more from:

*Dr. Allan Chapman, Dr Martin Grossel, Richard Smout
Rita Greer, Nick Minns, Paul Bingham,
IoW Symphony Orchestra, & Robert Hooke Society*

Observatory

When visiting the VAS observatory, for your own safety, please bring a torch. Also, please make sure you close and lock the car park gate if you are the last to leave - if you need the combination to the lock, please contact a member of the committee.

Articles Needed

New Zenith needs letters, articles, reviews or pictures related to astronomy. Contributions to the Editor at the email or postal address on the front page.

"Common sense is not so common"

Voltaire

"Only one thing is certain - that is, nothing is certain. If this statement is true, it is also false"

Ancient paradox

"Some things need to be believed to be seen"

Guy Kawasaki

Two brothers bought a cattle ranch and named it "Focus."

When their father asked why they chose that name, they replied: "It's the place where the sons raise meat"