



## THE LOS ANGELES ASTRONOMICAL SOCIETY

### THE BULLETIN

MARCH, 2017

VOLUME 91, ISSUE 3



Astronomer Paul Gitto has created this [masterful Messier Marathon](#) grid with 11 rows and 10 columns of [Messier catalog objects](#). In numerical order, the grid begins with [M1, the Crab Nebula](#), at upper left and ends with [M110](#), a small elliptical galaxy in Andromeda (lower right). Gitto's images were made with a digital camera and a 10-inch diameter reflecting telescope. Source: NASA

#### In This Issue

Eclipse Trip Announcement.....	Page 2
General Meeting Information.....	Page 3
Messier Marathon Information.....	Page 4
The Last Man Who Walked On the Moon by Ray Blumhorst.....	Pages 5-6
The Elevator Man by Lew Chilton.....	Pages 7-8
Outreach Report by Van Webster.....	Pages 9-10
March Star Report by Tre Gibbs.....	Page 11
New Members.....	Page 12
Magazine Subscriptions.....	Page 12
The Lockwood Committee Page.....	Page 13
Eclipse Trip General Information.....	Page 14
Almanac/NASA Megamovie Info.....	Page 15
Club Calendar .....	Page 16
NSN Discovery Guide.....	Page 17
Club Contact Information.....	Page 18
Mailer.....	Page 19

Interested in joining fellow club members for our annual Messier Marathon? Visit Pages 4 and 13 for more information.

# Last Chance for Eclipse Trip Hotel Packages

Members of the LAAS and others have had since the middle of last year to purchase a hotel package for a three-day stay in Idaho Falls, Idaho for the total solar eclipse on August 21, 2017. That opportunity is about to close so anyone else who wants to go must act fast.

The opportunity to purchase hotel reservations closes on March 24, 2017. The hotel requires the LAAS to release un-reserved rooms after that date. To sign up, go to: [www.LAAS-eclipse2017.com](http://www.LAAS-eclipse2017.com)

Membership in LAAS is a pre-requisite. For non-members there is an even earlier deadline looming. Non members must first join the LAAS. The last Board meeting to get approved as a member is March 8th. To get approved on March 8th, one's application and payment must be received by early Saturday, March 4th. Thus, it is advisable that anyone wanting to join and then sign up for the trip, to apply and pay online for LAAS membership by Friday, March 3rd. Registration by US mail can take several weeks.

Thanks,

John Fisanotti

## NASA's Eclipse Web Site and Resources

<https://eclipse2017.nasa.gov/>

## An Observer's Guide To Viewing The Eclipse All-American Total Solar Eclipse

A free PDF booklet about the 2017 eclipse and how to observe it safely

<http://www.nsta.org/publications/press/extras/files/solarscience/SolarScienceInsert.pdf>

## A resource guide to eclipses and eclipse 2017

Available to all at the Astronomical Society of the Pacific website

<http://www.astrosociety.org/eclipse>

## Getting a Feel for Eclipses

A tactile guide to eclipses that illustrates the interaction and alignment of the sun with the Moon and Earth

<http://lunarscience.arc.nasa.gov/books/>



*Image Credit: [Oregon State University - Solar eclipse, CC BY-SA 2.0.](#)*

## Night Sky Network

Eclipse presentations, outreach activities, and more

<http://bit.ly/NSNEclipse>

## General Meeting Information

Date: Monday, March 13, 2017

Time: 7:30 PM to 9:45 PM

Location: Griffith Observatory - Leonard Nimoy Event Horizon Theater



Our guest speaker will be Mike Simmons from Astronomers Without Borders and Mt. Wilson Observatory.

A total solar eclipse will cross the continental US on August 21 and the hype about it is in full swing. What is it all about and why is it such a big deal? Should you plan to go or watch the partial eclipse from home? Our speaker this month will tell us all about total eclipse, including his travels around the world to stand for a few minutes in the Moon's shadow, why he does it, and why you have to in August, too. He'll also tell us where to go and how to prepare for the experience of a lifetime.

**Bio:** Mike Simmons has been an amateur astronomer for 40 years and loves sharing the sky with others. Mike joined LAAS in the early 1970s and served in many capacities, including two terms as President and ten years on the Board of Directors. He also operated the Zeiss 12-inch refractor at Griffith Observatory from 1976 to 1980.

In the early 1980s, Mike was instrumental in founding the Mount Wilson Observatory Association (MWOA). He served as the founding President and was on MWOA's Board of Trustees for some 20 years.

Mike is currently the President of Astronomers Without Borders (AWB), an international organization he founded in 2007 to unite enthusiasts around the world based on astronomy, a universal interest that transcends cultural differences.

Mike is a writer and photographer who has contributed to publications including *Scientific American*, *Astronomy* and, *Sky and Telescope*, where he is a Contributing Editor. During the UN-declared International Year of Astronomy, 2009 Mike led the effort to organize the Cornerstone Project "100 Hours of Astronomy" in more than 100 countries, the largest outreach effort of the year.

Mike has traveled to the path of seven total solar eclipses and has led tours for eclipse-related travel companies. Working with partner organizations, he leads AWB's project to bring resources for the August 21 solar eclipse, and continuing science lessons based on the Sun, to schools in underserved communities across the US.

Minor Planet Simmons (22294) was named in his honor in 2003, in part for his "varied outreach activities in astronomy." In 2005 Mike was presented with the Clifford W. Holmes Award, an honor given annually by RTMC for a "Major Contribution to Popularizing Astronomy." In 2009 Mike received the prestigious G. Bruce Blair Award given annually by the Western Amateur Astronomers for "outstanding contributions to amateur astronomy." Mike was also awarded the prestigious 2014 Gabrielle and Camille Flammarion Prize from the Société Astronomique de France (SAF) for "setting a worldwide example that astronomy does transcend political and cultural borders."

### Parking Information:

Please drive through the tunnel and up West Observatory Rd. to the public parking lot. Show your club ID or nametags to the parking attendant in the lot to park. Handicapped spaces are available for those members with placards only.



## Messier Marathon - March 25, 2017

We are planning to hold a Messier Marathon this coming March 25, at our Lockwood Valley/Steve Kufeld Astronomical Site. The annual Messier Marathon is open to anyone willing to put up with the cold weather and slogging it to the wee hours of the morning. Please note that the Marathon has to start as soon as possible after it is dark enough to see the most western objects, and that we cannot have people coming late to set up. That is about the only restriction - other than to have fun!

Participants can use any type of scope (or even binoculars for some objects) - GOTO's, setting circles, star-hopping - all are encouraged to try.

While long-time LAAS member Herman Meyerdericks has been our overseer/judge/helper for many years, we are looking for someone, anyone - LAAS member or not - to help with the tasks that Herman has fulfilled as coordinator and leader. These tasks include helping the not-so-experienced find and identify objects, and making sure that recordings of observations are correct. Marathon leaders need to have a good amount of experience themselves with finding and identifying objects without the use of GOTO. They must also be sure-footed and can navigate the many trip-hazards we have to watch out for. Pad edges, electrical outlets, and the occasional gopher hole, just to name a few.



Thanks,

Kevin Gilchrist

Chair, Lockwood Master Plan Committee, 2017

## The Last Man Who Walked On The Moon

### By Ray Blumhorst

A little over a month after the passing of the last of the Mercury Astronauts, the last Apollo Astronaut to walk on the Moon has died. Gene Cernan passed away on January 16, 2017. He was 82 years old.



Although Cernan's accomplishments are many, he's remembered by many for taking the last human footstep on the moon on Dec. 14, 1972. Apollo Astronaut, Neil Armstrong took the first step July 21, 1969.

A book and recently released DVD titled, "The Last Man On the Moon" chronicles major events in Cernan's life and are a must for all space aficionados. The continuation of the book title reads, "The Story Behind America's Last Walk On the Moon."

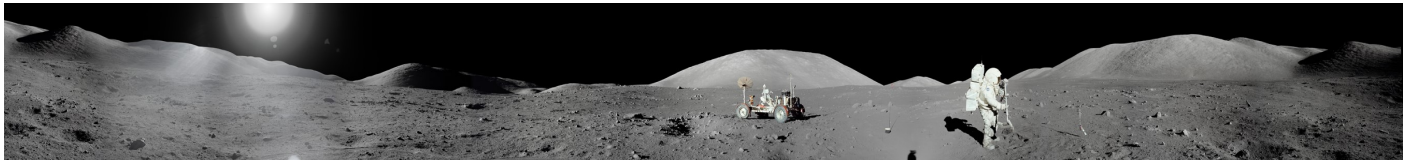
Not only was Cernan the last man to walk on the moon, he was a member of small, elite group of humans (the Apollo Astronauts) who went farther into space than any humans have gone since.

Cernan traveled into space three times. He was the pilot of Gemini 9A in June, 1966. He was the pilot of the Apollo 10 Lunar Module in May, 1969. And he was the Commander of Apollo 17, launched on December 7, 1972.

Continued from previous page...

Although 32 Astronauts were assigned to the Apollo Manned Lunar Landing Program, only 24 ever made it to the moon - either its surface or in orbit around it. Over the course of the nine Apollo missions, 12 made it to the Moon's surface. Cernan was the 11<sup>th</sup> Astronaut to step foot on the Moon, but his crewmate Harrison Schmitt stepped foot on the Moon after him and became the 12<sup>th</sup>. However, Schmitt was not "the last man on the Moon," because Schmitt returned to the lunar module, "Challenger" ahead of Cernan.

Regardless of the minutia, the Moon's Apollo landing sites are now more than destinations mankind once strove eagerly to reach. They've become memorials to brave human beings who courageously performed "the right stuff" and made vast strides in human knowledge and understanding. So, as we gaze afar at the Moon's many wonders through our earthbound telescopes, give a salute to Cernan and all the other brave Astronauts who've gone before. As your eyes pass over Taurus-Littrow in Mare Serenitatis, or some other landmark near an Apollo landing site, take the next step for mankind and say a few words expressing mankind's lingering desire to leap gigantically across the vastness, "We'll be back."



Apollo 17 at Taurus-Littrow in Mare Serenitatis

Wikipedia.com: All the photos were listed as in the public domain, no copyright

## The Elevator Man

by Lewis Chilton,

LAAS History Detective

I was talking to Griffith Observatory's Tony Cook the other day when our conversation turned to early LAAS members who made a name for themselves in astronomy. Tony brought up Robert Edgar whose name I had only recently encountered in LAAS records. Tony had come across his name in Chapter XXIV of "The Glass Giant of Palomar," by David O. Woodbury.

Robert Edgar (1862-1948) was a Scottish immigrant whose arrival in America in 1925 went unnoticed and, like so many others, left this world with little fanfare. But he deserves our attention for a couple of reasons: first, he joined the ranks of our organization on March 13, 1929 after only four years in the United States (Amazingly, we still have his membership application!), and, second, he may have had a hand in the design of the 200-inch Hale telescope. Now that I have your attention, please read on.



Robert Edgar, an early (1929) member of the Amateur Telescope Makers' Society. From a 1935 U.S. naturalization document.

LAAS ARCHIVE

Robert Edgar was a short, slight man of advanced years when he joined the Amateur Telescope Makers' Society. By day, he worked in a downtown office building or department store as an elevator operator. Older LAAS members may remember these vertical shaft jockeys. Like their airline pilot counterparts, they often wore military-style service caps and fancy uniforms, sometimes with epaulettes and gold braid on their shoulders. They were most often older men, but, increasingly, younger women filled their ranks in equal or greater numbers. Elevator operators held the doors open for passengers and sat on a small fold-down seat as they operated the controls and called out the floor numbers. ("Fourth floor, lingerie!") Our stomachs rose or fell, depending on whether the car was rising or falling, and for some passengers that queasy feeling was the closest they ever got to airline travel.

At night, Mr. Edgar was an armchair astronomer who avidly followed newspaper accounts of the new 200-inch telescope project. In 1928, he began attending a series of evening astronomy lectures at the Los Angeles Public Library at 5<sup>th</sup> and Grand. During the lecture of December 20, 1928, he listened with great interest to Professor Ferdinand Ellerman of the Mount Wilson Observatory who was substituting for his colleague, Dr. John Anderson, the new executive officer of the 200-inch project. Ellerman gave Anderson's talk, which was titled, "Larger Telescopes."

Continued from previous page...

In his book, Woodbury describes Edgar as a self-effacing, little old man who timidly approached Ellerman after the lecture and introduced himself. Edgar had wanted to talk with members of the Mount Wilson staff for some time but hadn't worked up the courage until now. To break the ice with Ellerman, he mentioned that his grandfather had worked as a mechanic for Lord Rosse, but he may have been confusing him with the Scottish Earl of Ross.

Edgar had an idea for a different kind of mount, one that would permit the 200-inch telescope to reach the North Star, something that the 100-inch Hooker telescope couldn't do. Ellerman listened patiently, then invited him to talk to Anderson. Edgar arrived promptly the following day at the Astrophysical Laboratory in Pasadena and was shown to Anderson's office.

Always ready to listen to a new idea no matter where it came from, Anderson asked Edgar what his idea was. Edgar nervously produced some drawings and laid them out on Anderson's desk, fully expecting them to be rejected out of hand. But Anderson was surprised by the beauty of the drawings and asked if he had made them. Edgar replied that he had and that there were hundreds more.

Without knowing it, Edgar had come up with a variation of a horseshoe design that Anderson and his colleagues had briefly considered but dismissed as unworkable. Edgar's drawings portrayed the horseshoe at nearly fifty feet across, but his graphic representation made Anderson reconsider. Maybe this design had merit after all.

Edgar explained that he first got the idea while visiting Mount Wilson Observatory and had been told that the north bearing of the 100-inch telescope prevented it from reaching the north polar region. Edgar had spent many nights working on a solution to this problem, and his solution was now laying on Anderson's desk. They spent a long while discussing Edgar's ideas.

After that meeting, Edgar returned many times with suggestions and ideas, many of them fresh and ingenious. He delighted everyone, but his lack of experience and scientific background prevented him from joining the project. By 1940, he was still an occasional visitor to the Lab and was, at last account, designing an 800-inch that would one day replace the 200-inch.

We may never know if Edgar's ideas were actually used in the final Hale telescope design, but it cannot be said that he left this world unnoticed.



## Plummer Elementary School - An Outreach Report by Van Webster

Date: Thursday, February 09, 2017

Time: 5:00pm – 7:30pm

Members of the Los Angeles Astronomical Society's Outreach Team traveled to Plummer Elementary School in North Hills for an evening of stargazing and interpretive discussions. The late afternoon sky had high altitude clouds covering most of the skies surface. It looked to be a challenge to find targets for the students to view.



Look at all those clouds! John O'Bryan prepares his scope for the star party.

One never knows at these events how the students will react to looking through a telescope, many for the first time.

There are the usual "Wows," quick glances and the occasional observer who takes a long time to study an object.

Still, it can be hard to impress the media saturated mind. One of the older girls, after looking at the Orion Nebula, turned away from the scope and said, "I've seen better."

By 7:00 PM the event was over and we packed up our equipment to the thanks of the school's administrative staff that set up the event.

Van Webster/LAAS

The school staff opened the playground gate and the LAAS astronomers drove in and set up their equipment. Early targets were a telephone pole and a distant palm tree. As students gathered about in hopes of looking through the telescopes, the nearly full moon appeared from behind a cloud bank in the east and we were happy off to show a bright and recognizable object.

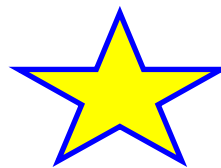
The evening progressed with over 100 students, faculty, staff and family members lining up at the telescopes for a look. Finding objects was much like watching Fatima and the Dance of the Seven Veils. Peeking through the gossamer clouds were Venus, Mars, The Moon, and later on the Orion Nebula. As one target disappeared behind the vapors, another one would reveal itself and telescopes were swinging about at a furious pace to keep something in sight.

When the clouds did clear, the air was particularly clear and still. The crescent of Venus was clearly visible, even a low magnification. There was plenty of nebulosity to be seen around M 42.



Zoly Dobrovics is all set up and ready to share the night sky.

Continued from previous page.

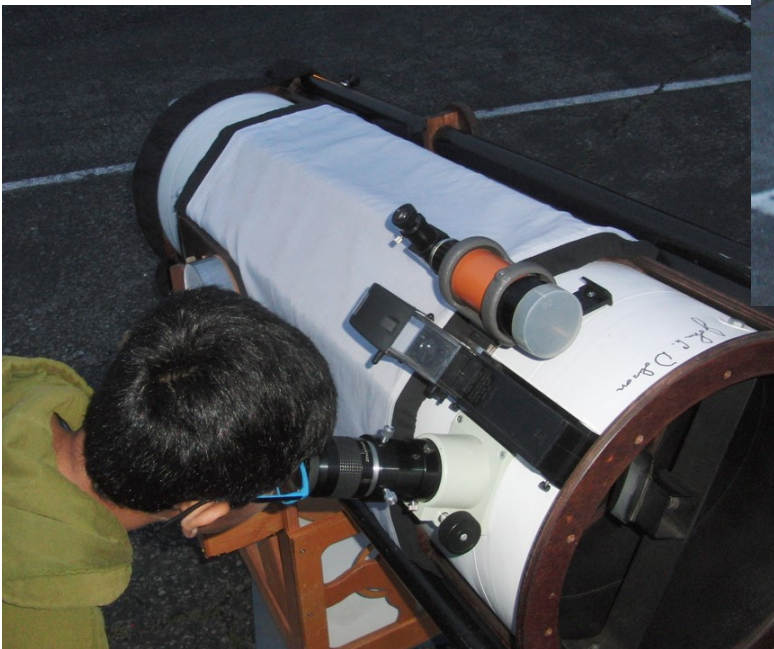


Left: John O'Bryan answers questions with one of the students. Heven R. is in the background setting up his scope.

Below: Lew Chilton assists a student to focus her view on an object in the sky.



Below: A student uses a Dobsonian scope signed by John Dobson.



**Thursday, February 9**  
**5:30 PM - 6:35 PM**

**Participate in science and math investigations!**  
**Look at the stars through telescopes**  
**provided by the**  
**Los Angeles Astronomical Society!**



  
**Save the Date!**  
**We'll see you there!**



Photo Credit: Van Webster



# A Guide To the Night Sky for March, 2017

By Tre Gibbs



*Goodbye Venus, Hello Jupiter!*

As we welcome the return of Spring this month, there are some interesting changes happening in the night sky. The planet Venus, which has been prominent in the southwest just after sunset all winter long, continues her fast decent towards the sun. By mid month, she will no longer be visible in our evening skies and by month's end, Venus will be on the other side of the sun, appearing as The Morning Star in our eastern, pre-dawn skies. Mars, The God of War, is following Venus - though obviously taking his time. By month's end, Mars will still be barely visible *very low* in the west just after sunset, but will drop quickly below the horizon as Earth continues her daily rotation, carrying us away from the light of the Sun.

As we bid Venus a temporary farewell from our evening skies, we welcome the return of the planet Jupiter! Visible just above the eastern horizon around 10:00 pm, Jupiter is the fourth brightest object in the sky, after the Sun, Moon and Venus. Jupiter is interesting for many reasons. First of all, it's a giant ball of gas - there's no hard surface on which to land anything. Secondly, it's MASSIVE. Almost eleven "side by side" Earths would span Jupiter's equator. Thirdly, at it's closest point, Jupiter is roughly 365 million miles away from Earth. How far is 365 million miles? Here's one way to grasp such an abstract distance; when you look at Jupiter, you are seeing it as it was roughly 33 minutes ago, since that's how long it took the light from Jupiter to reach your eye. On the evening of the 14th, look for Jupiter just above and to the right of the moon, both low in the east around 10:30 pm and gradually climbing higher as the night continues.

Speaking of the moon, this month's full moon, the Full Worm Moon, is on the 12th, technically at 7:54 am. The name "Full Worm Moon" is due to the time of year when ancient people and tribes noticed the ground beginning to soften and earthworm casts reappearing, thereby inviting the return of the red breasted robins, which means Spring!

...and speaking of *SPRING*, the Vernal Equinox happens this month! On March 20th at 3:21 am, we herald the official return of Spring in the Northern Hemisphere! The word **Equinox** is Latin for "*Equal Night*", so, this is what's happening - the sun's path in the sky has been moving northward since the Winter Solstice (December 21st) and on the 20th of this month, the sun will rise due east, set due west and as a result, we'll receive equal amounts of day and night - about 12 hours of each. From this point until June 21st, the sun's path in the sky keeps moving northward and the length of daylight continues to increase, as the amount of night continues to decrease.

In last month's article, I promised a few words about the planet Saturn, so... Saturn, like Jupiter, is a giant ball of gas, but this one is known for its amazing and beautiful ring system. And if you thought Jupiter was far, Saturn is more than twice as far - roughly 840 million miles away at it's closest point to us (remember, we're all traveling around the sun at different speeds, in different orbits), which is why it looks so small and nondescript to us here on Earth. In terms of light distance, when you see Saturn in the sky, the light from it took about an hour and forty five minutes to reach your eye! Saturn rises around 3:30 am this month, so I'll write more about it in the coming issues, as it slowly makes it's way into our mid to late evening skies.

Until then, don't forget to set your clocks forward one hour on the 12th. Oh, and show your kids the planets! The info in these articles can help - and the experience they get from you will stay with them forever. Keep looking up !

Tre Gibbs

Meet  
Our  
New  
Members



Natalie Tomco

Matthew Tuchscherer and Family

Manuel Bermudez

Dominique Butler

Hector Velarde

Joel Duot

Robert Wise

Bryon Kasper

Alan Jacknow

Richard Sprunger and Lindsay Goldstein



Remember to renew your membership once you receive notice from the Club Secretary. Use this link to learn how to renew your membership: <https://fs30.formsite.com/LAAS/MemberRenewal/index.html>

**SUBSCRIBE**

## Astronomy Magazine Subscriptions

Sky and Telescope renewals should be sent directly to Sky Publishing.

To start a subscription at club rates, send a check payable to "Sky & Telescope" in the amount of \$32.95 for a one year subscription to:

**Los Angeles Astronomical Society**

**C/O Griffith Observatory**

**2800 East Observatory. Road**

**Los Angeles, 90027**

**ATTN: Treasurer**

Be sure to include the exact name and mailing address for your subscription. Then, thereafter, send the renewal bills directly to Sky Publishing. **For a club rate subscription to Astronomy**, send a check payable to Kalmbach Publishing Co. in the amount of \$34 for one year or \$60 for two years to the above address. Be sure to include the exact name and mailing address for your subscription. That magazine also requires later subscription renewals to be handled through the LAAS Treasurer.

## Lockwood Committee News

### Kevin Gilchrist, Committee Chair

Hello fellow LAAS members!

And from the Lockwood Master Plan Committee: Since I'm now the chairperson and carry the big stick, I'm changing the name of the committee to plain old "Lockwood Committee." Yes, we will still work on the Master Plan with improvements and additions, but we also have to consider the yearly maintenance of the weeds and throwing some paint around.

And while I'm on the subject of Lockwood, I still haven't heard from anyone willing to take on the job of directing this year's Messier Marathon. It takes experience, patience, being steady on your feet all night, and being resistant enough to the cold-unless global warming kicks in with an instant change from winter to summer. Punxsutawney Phil saw his shadow and proclaimed six more weeks of winter. Well, that's pretty darn close to March 25.

If you want to have some fun, regardless of the temperature, come on up early on the 25th. Since the marathon must begin as soon as it is dark enough to see the most western

objects we can't have people coming in late. The kind of scope you use doesn't matter. This is not just for people who can find objects by star-hopping. GoTo's and binocular-only users are welcome. I know some people will be trying to do some image capturing at the event, but just so you are warned, I'm declaring laser pointers are OK for use. Just use them carefully.

A man and a woman walk into a joint to get something to eat. The waitress comes up to them at their table and the man asks, "Hey, what kind of a dump is this?" The waitress replies, "It's not a dump, it's a bistro." The man asks, "Oh, yeah? What's a bistro?" The waitress answers, "Bistro is French for -- dump."

--

Kevin Gilchrist

kevingilchrist59@yahoo.com





Source: Lutfar Rahman Nirjhar, Wikimedia Common,  
CC BY-SA 3.0

## Eclipse Trip, 2017 Update and News

### Alert All Eclipse Chasers!

LAAS is now in Phase III of sign ups for our 2017 Total Solar Eclipse Tour! Changes include the following:

- Package A, with reservations at the Fairbridge Inn and Suites Hotel is no longer available unless someone cancels. The hotel required that at this time, we release all rooms that we will not use.
- Package B, with the Rodeway Inn, will continue to be available for purchase until March 24, 2017 or until sold out.
- Package D (viewing site use, rehearsal & lunch, t-shirt, and solar viewing glasses) is now available at \$75/person. The registration and payment can be done on our LAAS website, [laas.org](http://laas.org). Note that all participants must be LAAS members and if not registered, cannot be present on the viewing field. This is required for insurance purposes.

For those already registered, a lengthy information sheet was emailed on our Yahoo Chat Group on 10/24/16 at 1:19 am, and on our Yahoo Announcement Group on 10/24/16 at 3:27 pm. If you need a copy, please email your request to Penny at [kunitani@ucla.edu](mailto:kunitani@ucla.edu). There was an important but short questionnaire at the end. If you have not yet emailed your responses to Penny, please do so now.

# Almanac



**March 12 - Full Moon.** The Moon will be located on the opposite side of the Earth as the Sun and its face will be fully illuminated. This phase occurs at 14:54 UTC. This full moon was known by early Native American tribes as the Full Worm Moon because this was the time of year when the ground would begin to soften and the earthworms would reappear. This moon has also been known as the Full Crow Moon, the Full Crust Moon, the Full Sap Moon, and the Lenten Moon.

• **March 20 - March Equinox.** The March equinox occurs at 10:29 UTC. The Sun will shine directly on the equator and there will be nearly equal amounts of day and night throughout the world. This is also the first day of spring (vernal equinox) in the Northern Hemisphere and the first day of fall (autumnal equinox) in the Southern Hemisphere.

• **March 28 - New Moon.** The Moon will be located on the same side of the Earth as the Sun and will not be visible in the night sky. This phase occurs at 02:58 UTC. This is the best time of the month to observe faint objects such as galaxies and star clusters because there is no moonlight to interfere.

Source: <http://www.seasky.org/astronomy/astronomy-calendar-2017.html>

Join your fellow club members by becoming an Outreach Volunteer. It's a fun and very rewarding experience for all club members. For more information, contact Heven Renteria at

[Outreach@laas.org](mailto:Outreach@laas.org)

## NASA Megamovie Information

Observations from the ground including high altitude observatories coupled with advanced image processing and stabilizing techniques can yield a wealth of information about the cosmos. For the 2017 eclipse a number of observing programs are being developed to explore the sun and corona through imaging and spectroscopy.

Ground-Based Operations: <https://eclipse2017.nasa.gov/ground-based-observations>

Learn more about the Megamovie:

Night Sky Network Eclipse 2017 Megamovie Webinar Link:

<https://eclipse2017.nasa.gov/ground-based-observations>

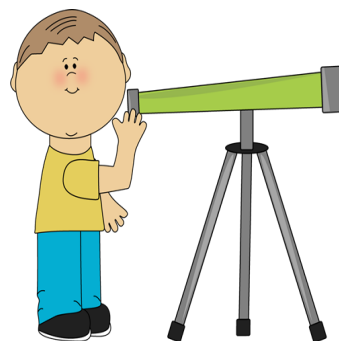


Free Downloadable Eclipse Posters:

<https://eclipse2017.nasa.gov/downloadables>

## Need Help With A New Telescope?

Need help with your new telescopes or other astronomy gear? Visit the Garvey Ranch Observatory on any Wednesday night 7 PM to 10 PM for tips and assistance by your fellow LAAS members.





Happy  
St. Patrick's  
Day.

*March, 2017*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26 PM Sunset	27	28	01 7:00 PM Garvey Nights	02 5:00 PM School star party	03 6:00 PM Eagle Rock Elementary Star	2:00 PM Public Sta Party
05 PM Sunset	06	07	08 7:00 PM Garvey Nights 8:00 PM LAAS Board Meeting	09 5:00 PM Math and Science Night 6:00 PM School Star Party	10	
12 PM Sunset	13 7:30 PM General Meeting	14	15 7:00 PM Garvey Nights	16	17	
19 PM Sunset	20	21	22 7:00 PM Garvey Nights	23 5:30 PM School Star Party	24 6:00 PM Huck Finn Fishing Derby &	5:00 PM Messier Marathon/Dark Sky
26 PM Sunset	27	28	29 7:00 PM Garvey Nights	30	31	2:00 PM Public Sta Party

LAAS Members: Please log on to the Night Sky Network to view all private and outreach events on the calendar. If you have not registered on the network, please follow this link and register today:

[https://nightsky.jpl.nasa.gov/club-apply.cfm?Club\\_ID=1344&ApplicantType=Member](https://nightsky.jpl.nasa.gov/club-apply.cfm?Club_ID=1344&ApplicantType=Member)



Universe  
Discovery Guide  
For March



Credit: NASA, ESA and AURA/Caltech

**Discover the universe with your family and friends!**

**IN THIS GUIDE:**

PLEIADES, TEENAGE SISTER STARS READYING TO LEAVE HOME » SKY FEATURE: PLEIADES STAR CLUSTER » TRY THIS! » ACTIVITY: YOUNG STAR CLUSTERS AND OLD STAR CLUSTERS » CONNECT TO NASA SCIENCE » Acknowledgements » Appendix: March Star Map

Download the March guide using the following link:

<https://nightsky.jpl.nasa.gov/docs/DiscoveryMarch.pdf>

Always use [Adobe Acrobat Reader](#) to view the Guides on a computer.

## Club Contact Information

President: Geovanni Somoza

geovanni\_somoza@hotmail.com

Vice President: Tim Thompson

Treasurer: John O'Bryan, Jr.

Treasurer@laas.org

Secretary: Spencer Soohoo

Secretary@laas.org

Outreach Coordinator: Heven Renteria

outreach@laas.org

Webmaster: Steve Dashiell

Webmaster@laas.org

Club Communications: Andee Sherwood

Communications@laas.org

Mt. Wilson Coordinator: Darrell Dooley

mtwilsoncoordinator@laas.org

Loaner Program: Dave Sovereign

626-794-0646

Bulletin Editor: Andee Sherwood

communications@laas.org

## Club Contacts

### Club Phone Numbers

LAAS Message Phone:

213- 673-7355 - Checked daily

Griffith Observatory:

213-473-0800

Sky Report:

213-473-0880

Lockwood Site:

661-245-2106

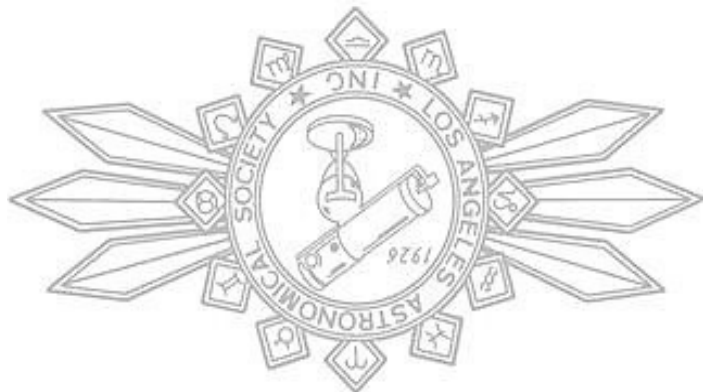


Not answered, arrange time with caller.

Outgoing calls – collect or calling card

Click on one of the images below to view hyperlinks attached for information about astronomy and for fun.





Contact Us  
**The Los Angeles**  
**Astronomical Society**  
 2800 E. Observatory Road  
 Los Angeles, CA 90027  
 Call us for more information  
 about our organization and  
 outreach program.  
 213-673-7355  
 Visit our web site at  
 www.LAAS.org

From:  
 The Los Angeles Astronomical Society (LAAS)  
 c/o Griffith Observatory  
 2800 E. Observatory Road  
 Los Angeles, CA. 90027

PLACE  
 STAMP  
 HERE

To: