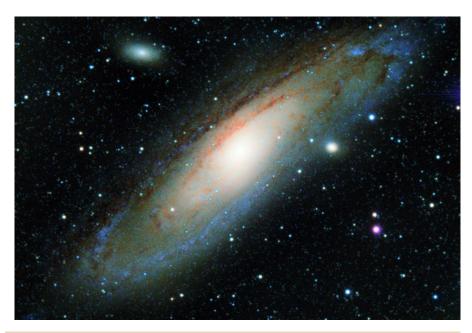


THE LOS ANGELES ASTRONOMICAL SOCIETY

OCTOBER, 2019 Volume 93, Issue 10

THE BULLETIN



Andromeda Galaxy processed with most of the foreground stars removed.

Photo credit: Nasir Jeevanjee

Volunteer for **SCIENCE NIGHT** on Sunday, Oct. 27th at the Garvey Ranch Park Observatory and share your favorite science experiment or hobby with the children in the local community. You can set up a craft table or a booth, shoot toy rockets on the lawn, play spooky Halloween music, or even bring along some treats for the children (and adults). **Science Night** is a very special event for the LAAS and we need many members to participate AND have fun evening, too. Bring along your telescope for a star party on the lawn. Come in costume, if you like and celebrate an early Halloween with all. See Page 2 to view the official flyer.

Join the Los Angeles Astronomical Society - To find our membership application and further information, please visit our website at <u>LAAS.org.</u>

In This Issue

RTMC Best In Show—Larry SteenhoekPage 2
Science Night FlyerPage 3
The Lion NebulaPage 4
Find Strange Uranus in AriesPages 5-6
Family Night - Sept. 21, 2019Pages 7-9
From the LAAS ArchivePage 10
60 Inch Nights at Mt. Wilson ObsPage 11
Meet the New MembersPage 12
October Star ReportPages 13-14
AlmanacPage 15
Calendar of EventsPage 16
The LAAS Outreach & Club SwagPage 17
Amazon Smiles & Astro MagazinesPage 18
Club Contacts & Social Media LinksPage 19

Public Star Party

October 5, 2019 - 2 PM to 9:45 PM

New Contact Info?

If you have recently moved, changed your email address or phone number, please contact our club secretary at secretary@laas.org.

Membership Renewal Notices

Keep your eyes open for email from the club secretary so you don't miss your renewal notice. Once your membership expires, you may need to reapply.

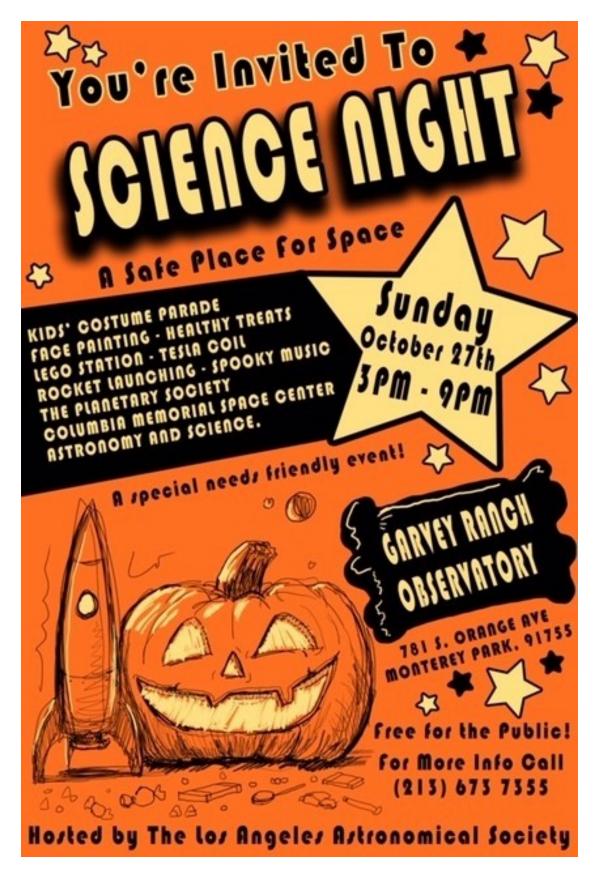
RTMC-"Best of Show" Goes to Larry Steenhoek By Joe Phipps

Congratulations to LAAS member Larry Steenhoek for winning this year"s Carmelita Miranda award for Best of Show in the astrophotography photo contest at RTMC with his photo of The Witches Broom and Pickering's Triangle, parts of the Veil nebula in the constellation Cygnus.

Congratulations, Larry!



Science Night—Sunday, Oct. 27, 2019



For further info, contact Geo Somoza at Geovanni somoza2hotmail.com

The Lion Nebula (Sh2-132) By Brian Paczkowski



The Lion Nebula (Sh2-132). A small piece of the beautiful but very faint emission-type **nebula** on the Cepheus/Lacerta border. This is a composite image made from narrowband data (Hydrogen Alpha, Oxygen III, and Sulphur II) and Red, Green and Blue broadband color data for the stars. The composite includes 5 hours of RGB data and a total of 44 hours of narrowband data taken over the past couple of weeks. The narrowband data was collected from my Bortle 7 light polluted backyard in Tujunga and the RGB data was collected at Lockwood Valley. Pre-processed in Nebulosity and processed in PixInsight. (AGOptical 10"iDK, 10Micron GM2000 HPS II mount, ZWO ASI 1600mm-cool at -25C)

Photo credit: Brian Paczkowski

Find Strange Uranus in Aries By David Prosper

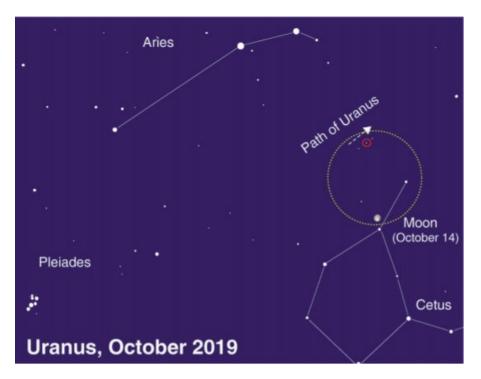
Most of the planets in our solar system are bright and easily spotted in our night skies. The exceptions are the ice giant planets: Uranus and Neptune. These worlds are so distant and dim that binoculars or telescopes are almost always needed to see them. A great time to search for Uranus is during its opposition on October 28, since the planet is up almost the entire night and at its brightest for the year.

Search for Uranus in the space beneath the stars of Aries the Ram and above Cetus the Whale. These constellations are found west of more prominent Taurus the Bull and Pleiades star cluster. You can also use the Moon as a guide! Uranus will be just a few degrees north of the Moon the night of October 14, close enough to fit both objects into the same binocular field of view. However, it will be much easier to see dim Uranus by moving the bright Moon just out of sight. If you're using a telescope, zoom in as much as possible once you find Uranus; 100x magnification and greater will reveal its small greenish disc, while background stars will remain points.

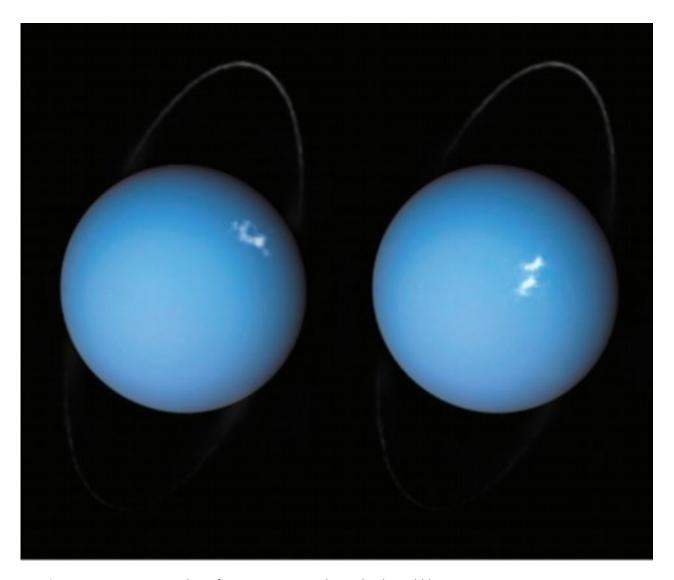
Try this observing trick from a dark sky location. Find Uranus with your telescope or binoculars, then look with your unaided eyes at the patch of sky where your equipment is aimed. Do you see a faint star where Uranus should be? That's not a star; you're actually seeing Uranus with your naked eye! The ice giant is just bright enough near opposition - magnitude 5.7 - to be visible to observers under clear dark skies. It's easier to see this ghostly planet unaided after first using an instrument to spot it, sort of like "training wheels" for your eyes. Try this technique with other objects as you observe, and you'll be amazed at what your eyes can pick out.

By the way, you've spotted the first planet discovered in the modern era! William Herschel discovered Uranus via telescope in 1781, and Johan Bode confirmed its status as a planet two years later. NASA's Voyager 2 is the only spacecraft to visit this strange world, with a brief flyby in 1986. It revealed a strange, severely tilted planetary system possessing faint dark rings, dozens of moons, and eerily featureless cloud tops. Subsequent observations of Uranus from powerful telescopes like Hubble and Keck showed its blank face was temporary, as powerful storms were spotted, caused by dramatic seasonal changes during its 84-year orbit. Uranus's wildly variable seasons result from a massive collision billions of years ago that tipped the planet to its side.

Discover more about NASA's current and future missions of exploration of the distant solar system and beyond at nasa.gov



Caption: The path of Uranus in October is indicated by an arrow; its position on October 14 is circled. The wide dashed circle approximates the field of view from binoculars or a finderscope. Image created with assistance from Stellarium.



Caption: Composite images taken of Uranus in 2012 and 2014 by the Hubble Space Telescope, showcasing its rings and auroras. More at bit.ly/uranusauroras

Credit: ESA/Hubble & NASA, L. Lamy / Observatoire de Paris



This article is distributed by NASA Night Sky Network

The Night Sky Network program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit night-sky.jpl.nasa.org to find local clubs, events, and more!

Family Night—September 21, 2019 Photo Credit: Kevin Kawai and Ray Blumhorst

Our last Family Night of the season took place on Saturday, Sept. 21st at our beloved dark sky site in Lockwood Valley, Ca.

Club member Kevin Kawai attended the event and shared the following comment:

"Been spending a lot of my free nights learning the art of astroimaging that I almost forgot how cool it is to do visual observing from a dark sky location."





Photo credit: Kevin Kawaii

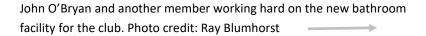


Above: Kevin's co-worker Wil Garcia waiting for the sun to set with his 2019 Celestron CGX 925 HD.

Photo credit: Kevin Kawaii



Above: Spencer SooHoo speaks with the attendees about the night sky. Photo credit: Kevin Kawai





Above: A photo of Kevin's telescope, a 2003 Celestron NexStar 11 GPS.

Photo credit: Kevin Kawai



Ray Blumhorst shared the following:

I arrived in the early afternoon and was able to join John, AI, Spencer and another LAAS member as they put the finishing touches on the new restroom building. It's a very nice facility and was ready for use by Saturday evening.

It looked like the attendance would be light for Family Night, but before sunset around 25 people had showed up.

The night sky was okay, but not great. I was able to get some images, but others were lost to the poor conditions. It was nice to talk to other LAAS members and show them images on my computer. Around 2:30 a.m. I was able to get an okay image of the 50% illuminated, waning Moon, but by 3:00 a.m. lots of clouds had moved in. The Moon was my last image of the night. It was a cool evening with temperatures in the low 40's to my best guess. By morning clouds filled the sky from horizon to horizon as indicated by photos taken on my drive out. The crisp morning air seemed to say, "Fall is only a few days away and winter is not far behind."



Photo credit for all images on this page: Ray Blumhorst





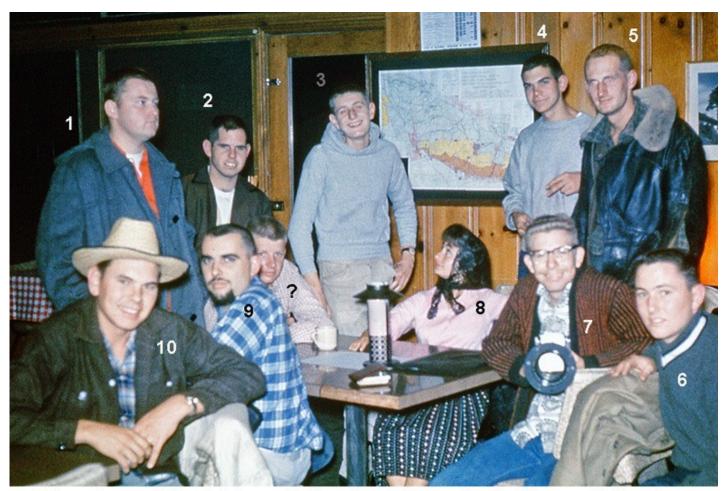






From the LAAS Archive Lew Chilton, Club Historian

1961 LAAS CHARLTON FLATS STAR PARTY - THE MIDNIGHT RUN TO NEWCOMB'S RANCH FOR COFFEE AND PIE. LAAS MEMBERS IDENTIFIED IN THE PICTURE ARE PAT LOWRY, PAT CANAN, JACK EASTMAN, LEW CHILTON, JOE MY-ERS AND STEVE SMITH.



LAAS members and friends take a midnite coffee and burger break at Newcomb's Ranch, a roadhouse on Angeles Crest Highway between Chilao and their star party site at Charlton Flats. Pictured are 1) Pat Lowry, 2) Mike Gardner, 3) Jim Eastwood, 4) Pat Canan, 5) Jack Eastman, 6) Lew Chilton, 7) Joe Myers, 8) Margie Locke, 9) Steve Smith, 10) Bill Stadt.

(from a Kodachrome by L. Chilton)

LAAS ARCHIVE

(scanned Dec. 18, 2016)

Session Schedule: 60 Inch Nights Only

Saturday, Oct. 26

Saturday, Nov. 23

The prices for these nights are as follows: \$50 - 60 Inch Nights

All of the dates above have been posted on the club calendar. These are private events exclusive to current LAAS members, families, and their guests only.

Please click on the following link to contact Darrell Dooley, our Mt. Wilson Coordinator before submitting payment.

mtwilsoncoordinator@laas.org.

To pay using PayPal or by credit card, please use the following link:

https://fs30.formsite.com/LAAS/MtWilson/index.html

To pay by check, please mail your check to:

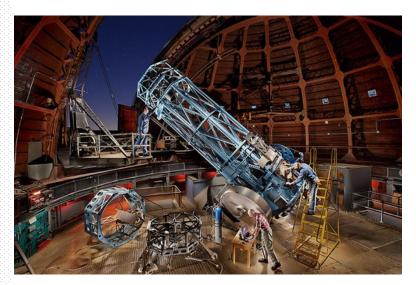
LAAS c/o Griffith Observatory

2800 E. Observatory Road

Los Angeles, CA. 90027

ATTN: Treasurer/Mt. Wilson

Mt. Wilson Nights 2019 Session Schedule







*Please write "60 Inch" on your check. Make your check payable to: LAAS

Note: If you pay by check, your check may be held by our Treasurer for several weeks, before clearing your bank.

Meet The New Members



John Gladwin

Charles Rogers

Audra Cramer

Eric and Catherine Patterson

Bob and Pam Jenner

Leonard Walker

Josie Enenstein

Todd Lerew

Hennrik Aibkhanov

Charlie Cisneros and Family

Matthew Taylor

Erin Johnson and Family

LAAS Board Meetings

Our LAAS Board Meetings take place once a month at the Garvey Ranch Park Observatory. You can find the dates for these meetings on our event calendar. All members are welcome to attend all Board meetings. These meetings begin at 8 PM.

All current members may listen to recorded meetings by logging on to our website at LAAS.org and clicking on the "Members Only" tab to find the files. Contact: webmaster@laas.org for your login credentials.

Volunteer Opportunities

Every LAAS member is a volunteer at some point. Some members volunteer to share telescopes with the public, while others tackle administrative duties, help out at our community and public events, or join a club committee. Taking photos at our events and writing articles about events for our club newsletter are great ways to volunteer.

Participating at one of our outreach events is another fine and fulfilling opportunity. This is YOUR club. Don't sit back and let other members do the work and have all the fun! Speak with a club officer and find out how you can volunteer and get more involved in the LAAS as a member.

Time To Renew Your Membership?

Please remember to renew your membership once you receive notice from the Club Secretary in your email inbox. Use this link to learn how to renew your membership:

https://fs30.formsite.com/LAAS/MemberRenewal/index.html

Please send any new contact information to the club secretary at secretary@LAAS.org.



October Star Report By Dave Nakamoto

Nights are finally longer than days. Jupiter is pretty much gone from our evening skies, and while Saturn is still up, it too is setting in the southwest as October wanes. The constellations of Autumn dominate the sky.

The Moon begins the month as a very thin crescent in the evening skies. It ends the month as a thin crescent in the morning skies.

First Quarter – 7th
Full Moon – 14th
Last Quarter – 22nd
New Moon – 28th

Finding things in the sky can be easy or hard. Easy if what you're looking for is bright enough that, if you aren't standing under or next to a bright light, you can see the brightest stars up there. Even from Garvey Ranch observatory, I'm lucky to see the brightest dozen or so stars easily, and perhaps a dozen or more not so bright.

The Summer Triangle is still high overhead. Facing south, Vega is the bright star up and to the right. Much fainter Deneb is up and to the left. Altair is south of both, almost s bright as Vega.

Harder to spot is the Great Square of Pegasus, due east of the Triangle. See if you can spot it. It's about as wide as the space between Vega and Deneb.

Jupiter is very low in the southwest, and is almost gone from the evening skies, so get your looks at it before it vanishes for about 6 month. During that time, Jupiter passes near the Sun, then enters into the morning skies. Because the observing time is brief, I don't have any Jovian moon events to report. For those willing to wake up early to do your observing, Jupiter will be high enough to observe in the morning by February.

Saturn trails behind and to the left of Jupiter in the southwest. Binoculars and low power telescopes will show that Saturn is definitely oval in shape, not round, but you'll need magnifications around 50x or more to see the rings distinctly. Despite being just about everyone's favorite planet, Saturn is small. With the rings it appears about as large as Jupiter. Without the rings, about half Jupiter's size, 45 times smaller than the Moon.

Lunar-X

Some features on the Moon are very transient, meaning they're only visible for an hour or so. Some are due to the Sun illuminating crater rims but nothing else. As such, luck is needed to see them, for while the Sun does slowly move across the lunar sky, it does move, and as such the appearance of lunar features does change, even from hour to hour.

On Saturday, Oct 5th, around 9:17pm, the feature known as the Lunar-X will be visible in telescopes capable of around 50x magnification. It will be located on the lunar terminator, the area between lunar day and night. It is formed by sunlight illuminating part of the crater walls of Blanchinus, La Caille and Purbach.

This image was taken by fellow LAAS member Todd Kunioki through Griffith Observatory's 12-inch f/15 refractor on November 26, 2017, using a 1/25th sec exposure at iso 200. The Lunar-X feature is visible near the lower left corner, and Lunar-V is near the upper right corner.

On the night of Oct 5th, Griffith Observatory will host a public star party. The members of the Los Angeles Astronomical Society will set up a dozen or so scopes on the lawn to give views of the heavens to all those in attendance, so if you want a view of Lunar-X and -V, come join us up at Griffith!

The Los Angeles Astronomical Society, also known as the LAAS, operates the Garvey Ranch Park observatory. The observatory is located just off the east parking lot. It's open to the public every Wednesday night from 7:00 PM to 10:00 PM. An 8-inch 9-foot long refracting telescope is available to look through, weather permitting. People often set up their own telescopes out on the lawn beside the observatory. There's a telescope making workshop on the ground floor, and LAAS members are ready to provide advice and knowledge on all things astronomical. And perhaps on a few other things with a little coaxing, all free of charge. So drop on by and bring your curiosity and sense of adventure!

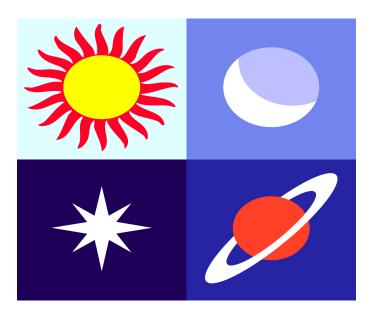




David Nakamoto has been observing the heavens through various scopes since he was in the $5^{\rm th}$ grade. He can be reached at

dinakamoto@hotmail.com.

Almanac



October 8 - Draconids Meteor Shower. The Draconids is a minor meteor shower producing only about 10 meteors per hour. It is produced by dust grains left behind by comet 21P Giacobini-Zinner, which was first discovered in 1900. The Draconids is an unusual shower in that the best viewing is in the early evening instead of early morning like most other showers. The shower runs annually from October 6-10 and peaks this year on the the night of the 8th. The first quarter moon will set shortly after midnight leaving fairly dark skies for observing. Best viewing will be in the early evening from a dark location far away from city lights. Meteors will radiate from the constellation Draco, but can appear anywhere in the sky.

October 13 - Full Moon. The Moon will be located on the opposite side of the Earth as the Sun and its face will be will be fully illuminated. This phase occurs at 21:09 UTC. This full moon was known by early Native American tribes as the Full Hunters Moon because at this time of year the leaves are falling



Need Help With A New Telescope?

Visit the Garvey Ranch Observatory on any Wednesday night 7 PM to 10 PM for tips and assistance from your fellow LAAS members.

This is a free event for the public.

Learn more: The Garvey Ranch Park Observatory

October 20 - Mercury at Greatest Eastern Elongation. The planet Mercury reaches greatest eastern elongation of 24.6 degrees from the Sun. This is the best time to view Mercury since it will be at its highest point above the horizon in the evening sky. Look for the planet low in the western sky just after sunset.

October 21, 22 - Orionids Meteor Shower. The Orionids is an average shower producing up to 20 meteors per hour at its peak. It is produced by dust grains left behind by comet Halley, which has been known and observed since ancient times. The shower runs annually from October 2 to November 7. It peaks this year on the night of October 21 and the morning of October 22. The second quarter moon will block some of the fainter meteors this year, but the Orionids tend to be fairly bright so it could still be a good show. Best viewing will be from a dark location after midnight. Meteors will radiate from the constellation Orion, but can appear anywhere in the sky.

October 27 - Uranus at Opposition. The blue-green planet will be at its closest approach to Earth and its face will be fully illuminated by the Sun. It will be brighter than any other time of the year and will be visible all night long. This is the best time to view Uranus. Due to its distance, it will only appear as a tiny blue-green dot in all but the most powerful telescopes.

October 28 - New Moon. The Moon will located on the same side of the Earth as the Sun and will not be visible in the night sky. This phase occurs at 03:39 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/astro



October 2019

Sun	Mon	Tue	Wed	Thu	Fri	Sat	
		1	2	3	4	5	
			Garvey Night	Outreach— Granada Hills	Outreach-	Public Star	
			Lockwood		Arcadia	<u>Party</u>	
			Committee				
			Meeting				
6	7	8	9	10	11	12	
			Garvey Night	Outreach-		<u>Geranium</u>	
			Board Meeting	East LA		Festival-	
						Monterey Park	
13	14	15	16	17	18	19	
			Garvey Night				
20	21	22	23	24	25	26	
Outreach-	General		Garvey Night	Outreach-		Dark Sky Night	
Agoura Hills	Meeting			East LA		60 Inch Night	
27	28	29	30	31		Nov 2, 2019	
Science			Garvey Night			Public Star	
						<u>Party</u>	
Science Night!				AAA N			
- 149**10							

LAAS Outreach Program

The mission of LAAS is to promote interest in and advance the knowledge of astronomy, optics, telescope making and related subjects. In furtherance of its mission, LAAS conducts public star parties and other outreach events that are intended to enhance the public's understanding of astronomy and its enjoyment and appreciation of the beauty and wonders of our universe.



We provide outreach events at local schools, Griffith Observatory, Mt. Wilson Observatory, various state and county parks, and community events.

Join our Outreach team of volunteers today.

Contact Heven Renteria, our Outreach Coordinator at Outreach@LAAS.org



Want to include astronomy outreach at your school's science night or open house? Follow the link below to access the request form:

https://nightsky.jpl.nasa.gov/club-eventrequest.cfm? Club ID=1344

LAAS Club Swag

LAAS JACKETS, T-SHIRTS, AND CAPS

Share your club spirit with the public and wear your club colors to help identify you as a member of the LAAS today by ordering a new jacket, t-shirt or cap.

To order club swag, please use the following link: http://laas.org/joomlasite/index.php/laas-merchandise











Amazon Smiles

Astronomy Magazine Discounts

The LAAS is now listed on Amazon Smiles. When you purchase any goods on Amazon.com, Amazon will donate a small percentage of the funds they receive from you, back to the LAAS. Here's some information to help bring in funds for our club projects:

What is AmazonSmile?

AmazonSmile is a simple and automatic way for you to support your favorite charitable organization every time you shop, at no cost to you, with the added bonus that Amazon will donate a portion of the purchase price to your favorite charitable organization., such as the LAAS!

Learn more by following this link: http://smile.amazon.com/



Disclaimer: The Los Angeles Astronomical Society, Inc. is a public charity, as defined by Internal Revenue Code Section 501(c)(3) and all contributions to the Society are deductible for Federal and State Income tax purposes. The Society does not endorse Amazon.com or any of its business practices, but we are registered with Amazon Smile and will accept contributions from that program. If you are an Amazon customer and would like to have part of the proceeds from your purchase retuned to the Society as a contribution, please go to https://smile.amazon.com/ when you are shopping on Amazon and select Los Angeles Astronomical Society under the caption: "Or pick your own charitable organization." A percentage of you purchases will be donated to the Society to fund its educational and outreach programs.

John O'Bryan, Jr.

Treasurer

Discounts for astronomy magazines can be found on the internet. Look for the best deals possible. Send a copy of your LAAS membership card with your check or payment to receive a club member discount.



As a member of the Night Sky Network, you may use the above link to renew

your Astronomy Magazine subscription (or enter a new subscription) at the club discount rate. If this is a renewal, Astronomy Magazine will match your entered name and address and extend your subscription. For inquiries, please contact Astronomy Magazine customer service & sales at 1-800-533-6644.

Click here for a NEW Sky & Telescope subscription at the club discount rate.







Join the Astronomical Society of the Pacific and help support the cause of advancing science literacy through engagement in astronomy. Member benefits include a subscription to the online Mercury Magazine, published quarterly, and Astronomy Beat, a monthly on-line column written by "insiders" from the worlds of astronomy research and outreach.

Subscribe or renew to the McDonald Observatory's StarDate Magazine and receive a special discount. Go to this page and press "Add to Cart" under the kind of subscription you want:

http://stardate.org/store/subscribe
Then, on the Checkout form, enter
"network" in the Coupon Code box.



Club Contact Information

President: Timothy Thompson

timthompson3@verizon.net

Vice President: Curtis Byrom

cbyrom484@yahoo.com

Treasurer: John O'Bryan, Jr.

treasurer@laas.org

Secretary: Spencer Soohoo

secretary@laas.org

Outreach Coordinator: Heven Renteria

outreach@laas.org

Youth Coordinator: James Rochford

jcrochford@gmail.com

Webmaster: Steve Dashiell

webmaster@laas.org

Club Communications: Andee Sherwood

communications@laas.org

Mt. Wilson Coordinator: Darrell Dooley

mtwilsoncoordinator@laas.org

Bulletin Editor: Andee Sherwood

communications@laas.org



Find astronomy outreach activities by visiting NASA's Night Sky Network:

https://nightsky.jpl.nasa.gov/about.cfm

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 only.



Follow us on social media by clicking on one of the images below













From:

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

PLACE STAMP

www.LAAS.org

213-673-7355

Visit our web site at

outreach program.

sələgnA soJ ədT

Call us for more information about our organization and

Astronomical Society 2800 E. Observatory Road Los Angeles, CA 90027