



# THE LOS ANGELES ASTRONOMICAL SOCIETY

FEBRUARY 2024  
VOLUME 98, ISSUE 2

# THE BULLETIN



Above is a picture of our current Club President, Darrell Dooley who spent the evening with a group of LAAS members at the 60 Inch Night at Mt. Wilson on August 8, 2015.

Photo credit: Unknown

The Garvey Ranch Park Observatory is open for free to the public and to all LAAS members and friends on Wednesday nights from 7:30 PM to 10 PM. Go to our website at [LAAS.org](http://LAAS.org) and click on "Locations" to learn more about this special weekly event.



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## Upcoming Club Events

- Board Meeting: Feb. 7
- Dark Sky Night: Feb.10
- General Meeting: Feb. 12
- Public Star Party: Feb. 17

# Mt. Wilson 60 and 100 Inch Nights

## Schedule for 2024

### 60 Inch Dates:

Friday Apr. 5

Friday May 3

Friday June 7

Friday July 5

Friday Aug. 2

Saturday Sept. 7

### 100 Inch Nights:

Saturday April 13th.

Friday Oct. 4th.



### The Cost per person, per session:

60 Inch Night - \$65.00

100 Inch Night - \$145.00 (Booked/Waiting List only)

There will be 20 people, per session

Learn more about these incredible events by visiting Mt. Wilson Observatory's website:

<https://www.mtwilson.edu/60-telescope/>

<https://www.mtwilson.edu/100-telescopeobserving/>

### How to Make a Reservation?

Please contact Darrell Dooley **BEFORE** you pay for your reservation. Darrell is our Mt. Wilson Coordinator and the **ONLY** contact available.

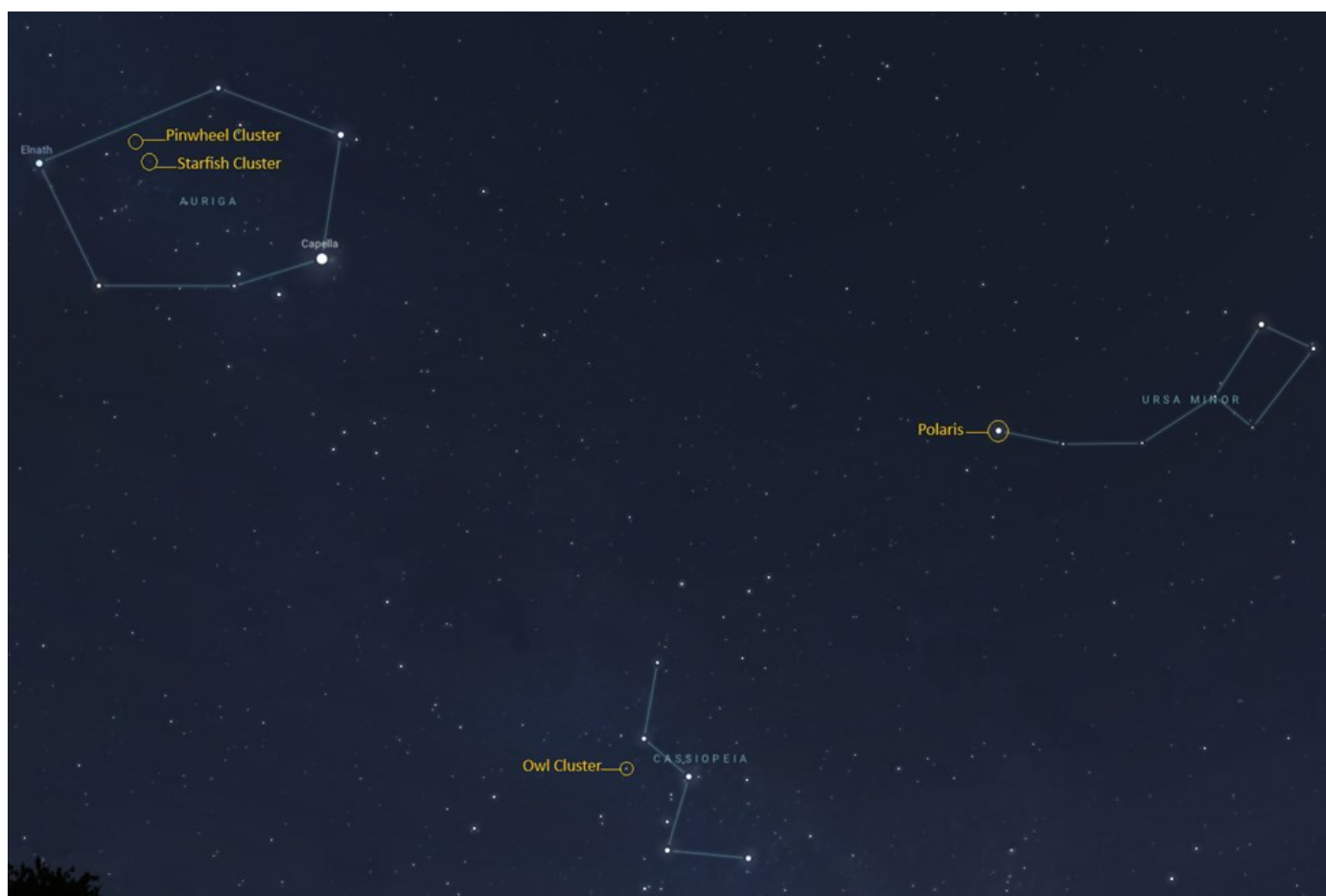
Darrell's Email Address: [Mtwilsoncoordinator@laas.org](mailto:Mtwilsoncoordinator@laas.org)

Darrell will answer all of your questions and concerns.

# Constant Companions: Circumpolar Constellations, Part I

By Kat Troche

Winter in the northern hemisphere offers crisp, clear ([and cold!](#)) nights to stargazers, along with better views of several circumpolar constellations. What does circumpolar mean when referring to constellations? This word refers to constellations that surround the north and south celestial poles without ever falling below the horizon. Depending on your latitude, you will be able to see up to nine circumpolar constellations in the northern hemisphere. Today, we'll focus on three that have gems within: **Auriga**, **Cassiopeia**, and **Ursa Minor**. These objects can all be spotted with a pair of binoculars or a small to medium-sized telescope.

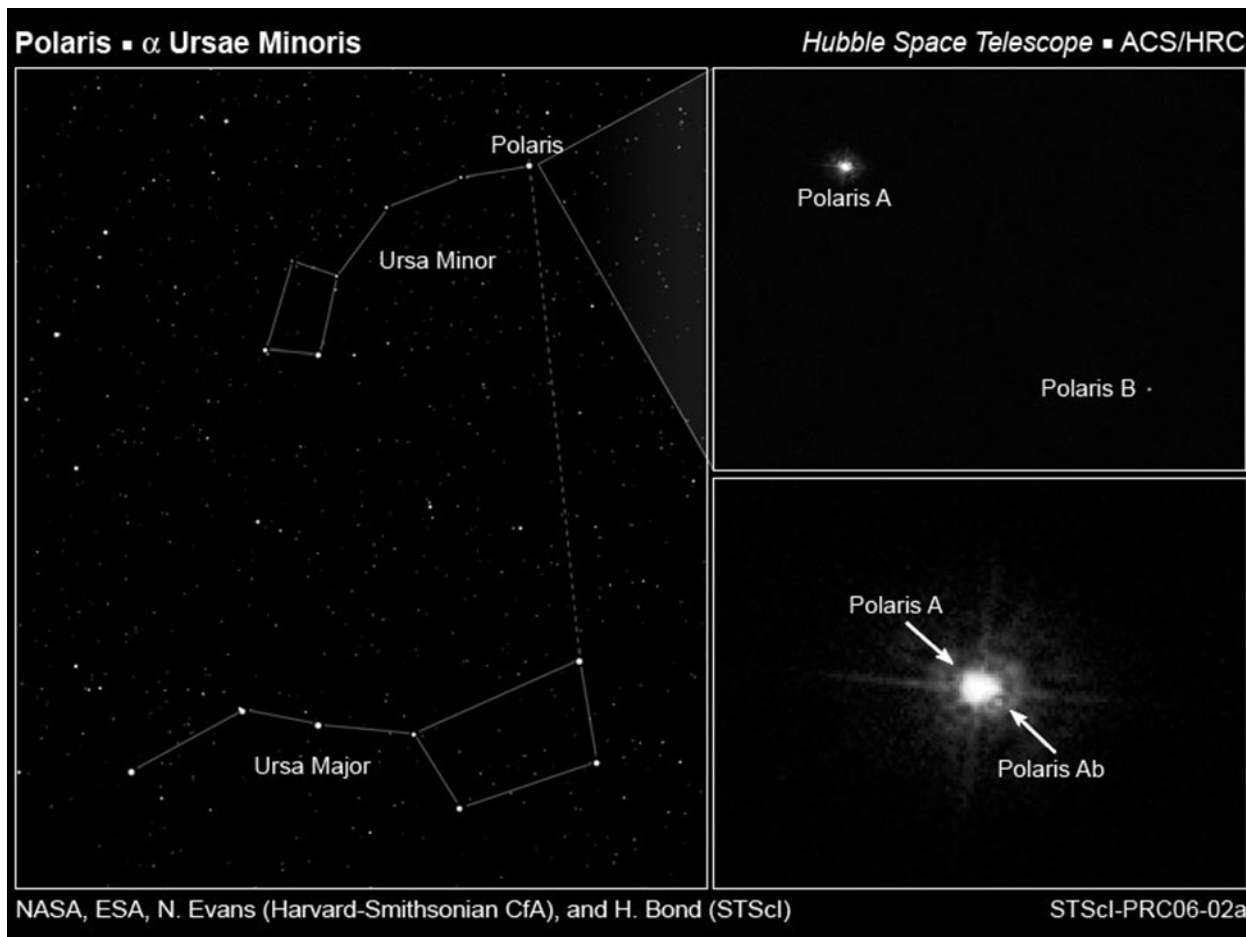


The counterclockwise circumpolar constellations Auriga, Cassiopeia, and Ursa Minor in the night sky, with four objects circled in yellow labeled: Pinwheel Cluster, Starfish Cluster, Owl Cluster, and Polaris.

Credit: Stellarium Web

**The Pinwheel Cluster:** Located near the edge of Auriga, this open star cluster is easy to spot with a pair of binoculars or small telescope. At just 25 million years old, it contains no red giant stars and looks similar to the Pleiades. To find this, draw a line between the stars Elnath in Taurus and Menkalinan in Auriga. You will also find the **Starfish Cluster** nearby.

**The Owl Cluster:** Located in the 'W' or 'M' shaped constellation Cassiopeia, is the open star cluster known as the **Owl Cluster**. Sometimes referred to as the E.T. Cluster or Dragonfly Cluster, this group of stars never sets below the horizon and can be spotted with binoculars or a small telescope.



A black and white image from the Hubble Telescope of the Polaris star system, showing three stars: Polaris A, Ab, and Polaris B. Credit: NASA, ESA, N. Evans (Harvard-Smithsonian CfA), and H. Bond (STScI)

**Polaris:** Did you know that [Polaris is a triple star system](#)? Look for the North Star on the edge of Ursa Minor, and with a medium-sized telescope, you should be able to separate two of the three stars. This star is also known as a [Cepheid variable star](#), meaning that it varies in brightness, temperature and diameter. It's the closest one of its kind to Earth, making it a great target for study and [conceptual art](#).

Up next, catch the King of the Planets before its gone for the season with our upcoming mid-month article on the [Night Sky Network](#) page through NASA's website!



This article is distributed by NASA's Night Sky Network (NSN).

The NSN program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit [nightsky.jpl.nasa.gov](https://nightsky.jpl.nasa.gov) to find local clubs, events, and more!

# Photos

By Rafael Gonzalez



Jupiter



Saturn



The Rosette Nebula



The Rosette Nebula



NGC 2174

Monkey Head Nebula





Pac Man Nebula – NGC 281

My astrophotography setup is tailored to combat light pollution in the Los Angeles area. I'm currently employing narrowband filters alongside meticulous techniques like light frames, dark frames, flats, and bias frames that reflects a thorough approach. The combination of my equipment—such as the William Optics FLT 132mm triplet APO refractor, ZWO 294MC Pro camera, and Optolong Ultimate filter—along with software like PixInsight and Lightroom, have enabled me to be able to capture these celestial objects. If you'd like to check out my other pictures please visit my social media platform @urbancityastronomer.

Photo Credit: Rafael Gonzalez

# Monthly Sky Report

## By Dave Nakamoto

Well, the daylight hours continue to increase and the night hours decrease throughout the month.

The moon is at last quarter on the 2<sup>nd</sup>, is new on the 9<sup>th</sup>, first quarter on the 16<sup>th</sup>, and full on the 24<sup>th</sup>.

From evening to morning, the planets appear in this order.

**Saturn** is well placed for evening viewing. On the 1<sup>st</sup>, the sun sets at 5:23 p.m., PST, and Saturn sets in the west-southwest at 7:16 p.m., PST. On the 20<sup>th</sup>, the sun sets at 5:41 p.m., PST, and Saturn sets at 6:12 p.m., PST, only 31 minutes later, and is not observable. It will appear in the morning skies late in March. A telescope with a magnification of 50x or more is needed to see the planet's rings and its large moon Titan. Some of the fainter, smaller moons such as Rhea and Dione might be visible too, hovering close to Saturn.

**Neptune** sets at 8:48 p.m., PST, on the 1<sup>st</sup>. On the 29<sup>th</sup>, sunset is at 5:49 p.m., PST and Neptune sets at 7:02 p.m., PST, an hour and 13 minutes later. On the 15<sup>th</sup>, Neptune is at Right Ascension 23<sup>h</sup> 48<sup>m</sup> 1<sup>s</sup> with a declination of -2° 37' 30". The disk of Neptune is only 2.2 arcseconds wide, and so a telescope with a magnification of 150x or more is required to show the disk, and then no details will be seen on such a small disk. Neptune's largest moon, Triton, may be visible in telescopes with an aperture of 10-inches or more.

**Jupiter** is in Aries the Ram. On the 1<sup>st</sup>, Jupiter sets in the west at 12:09 a.m., PST, and on the 29<sup>th</sup>, Jupiter sets at 10:35 p.m., PST. The planet's disk is 38 arcseconds wide, so a telescope capable of magnification 50x will show the Red Spot, and the four bright Galilean moons can be seen moving back and forth, across and behind Jupiter.

**Uranus** is the last of the "evening" planets and is also in the constellation Aries the Ram. On the 1<sup>st</sup>, Uranus sets in the west at 1:07 a.m., PST. On the 29<sup>th</sup>, the planet sets at 11:16 p.m., PST. On the 15<sup>th</sup>, Uranus is at Right Ascension 3<sup>h</sup> 7<sup>m</sup> 29<sup>s</sup> with a declination of +17° 15' 28". Uranus' disk is only 3.6 arcseconds wide, and so a telescope with a magnification of 150x is needed, and even then, no details will be visible on such a small disk.

On the 1<sup>st</sup>, **Venus** appears in the east-southeast around 4:59 a.m., PST, and the sun rises at 6:51 a.m., PST, one hour and 52 minutes later. On the 15<sup>th</sup>, the planet is 89-percent illuminated and 12 arcseconds wide, a small gibbous disk. On the 29<sup>th</sup>, Venus rises at 5:16 a.m., PST, with the sun rising at 5:57 a.m., PST, 41 minutes later. A telescope with a magnification of 100x is needed to see its shrinking disk, as it journeys on the far side of its orbit.

On the 1<sup>st</sup>, **Mars** rises in the east-southeast at 5:42 a.m., PST, one hour and nine minutes before sunrise. While its disk is nearly full, 98-percent illuminated, it is very small, only 4.2 arcseconds wide, and therefore no features will be visible in any telescope. On the 29<sup>th</sup>, Mars rises at 5:07 a.m., PST, one hour and 17 minutes before sunrise. Throughout 2024, Mars continues to rise earlier but will remain small until December 2024.

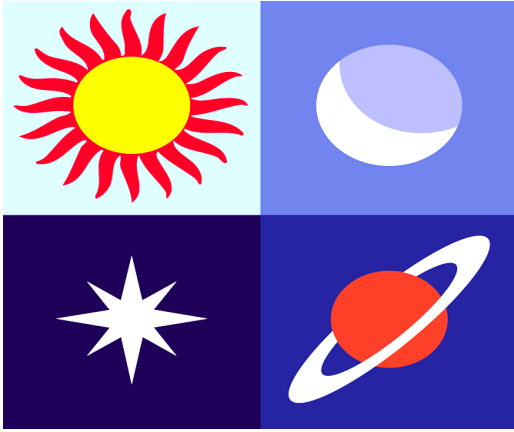
On the 1<sup>st</sup>, **Mercury** rises in the east-southeast at 5:56 a.m. PST, 55 minutes before sunrise. On the 15<sup>th</sup>, Mercury rises at 6:19 a.m., PST, and sunrise is at 6:38 a.m., PST, only 19 minutes later, so Mercury is too close to the sun. For the rest of February, Mercury cannot be safely observed. Do not observe any planet when it comes close to the sun, for the danger to the eyes is great.

**SPECIAL EVENTS** this month include:

**A conjunction of Mars and Venus** will occur on February 22. The two planets will pass within 38 arcseconds of each other, about the width of the full moon. Mars will be very faint and harder to spot than the much brighter Venus. Binoculars or a small spotting telescope will assist with seeing the fainter Mars. Venus rises at 5:15 a.m., PST. Mars rises at 5:17, and the sun rises at 6:31 a.m., PST, one hour 16 minutes later.

David Nakamoto has been observing the heavens through various scopes since he was in the 5th grade. You can contact Dave by email at: [dinakamoto@hotmail.com](mailto:dinakamoto@hotmail.com).





# Almanac

Source:

[Seasky.org](https://seasky.org)

**February 9 - 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 23:00 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.

**February 24 - 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 12:32 UTC. This full moon was known by early Native American tribes as the Snow Moon because the heaviest snows usually fell during this time of the year. Since hunting is difficult, this moon has also been known by some tribes as the Hunger moon.



## Solar Eclipse Links and Resources

American Astronomical Society: <https://eclipse.aas.org/>

Astronomical Society of the Pacific: <https://astrosociety.org/education-outreach/eclipse.html>


National Informal STEM Education Network: <https://www.nisenet.org/solareclipse>

My NASA Data: <https://mynasadata.larc.nasa.gov/phenomenon/solar-eclipse>

[Rice Space Institute](https://www.rice.edu/~space) (free for noncommercial and educational use with credit)

[Save the Date Postcards](https://www.nasa.gov/postcards) (NASA)

# February 2024

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7 Garvey Obs. Board Mtng.	8	9	10 Dark Sky Night
11	12 General Mtng.	13	14 Garvey Obs. 	15	16	17 Public Star Party Outreach in Santa Monica
18	19	20	21 Garvey Obs.	22	23	24
25	26	27	28 Garvey Obs.	29		

# Meet The New Members

## Welcome to the LAAS!

Dylan Anderson	Mark Greninger	Mary Mills
Kendra Base	Brian Holloway	Michael Noble
Philip Beer	Philip Houghtaling	Rick Pinson
Kevin Frost	Xinyan Huang	Ashley Walters
Daniel Gallupi	David Law	John Willsund
Sebastian Ghielmetti	Eric Melkerson	

## LAAS Board Meetings

All Board Meetings are held online, live on Zoom. Please check the information posted in the IO Group Forum for any current news related to these meetings. If you wish to attend a board meeting, please send a request to [secretary@laas.org](mailto:secretary@laas.org) for a link to Zoom.

## 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 and become more involved in the LAAS as a member.

Volunteers are always welcome to write articles for our monthly newsletter or share images captured of the night sky. Members are also welcome to come up with new ideas and future activities for the membership which can be shared in Board meetings. If you are artistic and enjoy creating posters or flyers, or printable astro-educational handouts for further star parties, please let us know.

Please send any articles, images, or artwork to the newsletter editor here: [communications@laas.org](mailto:communications@laas.org)

## Time To Renew Your Membership?

Please remember to renew your membership after you receive a notice from the Club Secretary.

Please send any new contact information to the club secretary at [secretary@LAAS.org](mailto:secretary@LAAS.org) OR login to your account here: <https://common.wildapricot.com/login>



# Outreach Team Volunteers

***“We are dedicated to advancing the knowledge of astronomy, optics, telescope making, and the wonders of our universe.”***



One of the ways the LAAS advances the knowledge of astronomy and the wonders of our universe is to visit local schools in our area with telescopes. The telescope operators are current members of the club. Many schools invite us to their campus to provide views of the objects in the night sky for not only the children but for the staff and parents, too. Some schools invite us on scheduled “Science Nights” while other schools plan a special evening of astronomy education on their campus. Other activities may be planned by the school during the event while our members are stationed in one specific location with telescopes to share with students and other school guests. These special members are part of our Outreach Team.

Our Outreach Coordinator is Heven Renteria. He and the others on his team have been attending outreach events on campuses throughout Los Angeles county and beyond.. Many of them travel great distances (and after a full day of work) to share astronomy with children and the public. The LAAS is also invited to attend special community events or events at state or city parks, libraries, and other venues. Recently, the club could not accept additional requests for outreach events because the team’s schedule was full.

The LAAS needs more members to join the outreach team. Some of these events may be local to you. Outreach members are greatly appreciated by the school administrators and students at every event.

You don’t need to be an expert using a telescope as the members of the team will help you set up and find objects in the sky to share with the students. You can attend an outreach event without a telescope and help the team with their telescopes or help with the long lines of children who are excited to look through a telescope for the first time.

These events are fun and rewarding in many ways. The enthusiasm shared by the children is infectious, in the best way possible. If you enjoy attending Public Star parties at the Griffith Observatory, you will enjoy a school outreach event.

The Outreach Team really needs your support and participation.

Please contact Heven at [outreach@laas.org](mailto:outreach@laas.org) to learn more.

Thank you for volunteering!

Andee Sherwood  
Communications



*John O’Bryan shows a student the Sun at Overland Elementary, 2021.*

*Photo credit: Van Webster*

## 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](mailto:Outreach@LAAS.org) for more information.



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

[Outreach Request Form](#)

## LAAS Club Merchandise

### LAAS T-SHIRTS, HOODIES, MUGS, AND MORE!

To find new merchandise from our store, please use the following link: [Shop Here](#)

Please note all prices listed are subject to change and include all shipping and handling costs. All items will be shipped directly to the address you provide on your order form.



LAAS Hoodie



**Donate**



**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.

John O'Bryan, Jr.

Treasurer

# Astronomy Magazines

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.



[Click here to subscribe to Sky and Telescope Magazine.](#)



Subscribe or renew to the McDonald Observatory's StarDate Magazine and receive a special discount. Follow this link to subscribe and press "Add to Cart" under the type of subscription option: <http://stardate.org/store/subscribe>

On the Checkout form, enter "network" in the Coupon Code box.



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.

Use [this link](#) to begin the subscription process.



[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 [Mercury Magazine](#), published quarterly.



## Club Contact Information

President: Darrell Dooley

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

Vice President: Alecia Hurst

[hurst.alecia@gmail.com](mailto:hurst.alecia@gmail.com)

Treasurer: John O'Bryan, Jr.

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

Secretary: Spencer Soohoo

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

Outreach Coordinator: Heven Renteria

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

Club Communications: Andee Sherwood

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

Mt. Wilson Coordinator: Darrell Dooley

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

Bulletin Editor: Andee Sherwood

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

Club Historian—Lew Chilton

[trainfans2@sbcglobal.net](mailto:trainfans2@sbcglobal.net)



Find astronomy outreach activities by visiting NASA's [Night Sky Network](#)

## Club Contacts

### Club Phone Numbers

LAAS Message Phone:

213- 673-7355 (Checked daily)

Griffith Observatory:

213-473-0800

Sky Report:

213-473-0880



Follow us on social media by clicking on one of the icons below:



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YouTube



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