



The Sonora Astronomical Society's SONORAN STARRY NIGHTS

FEBRUARY 2024

February Meeting Details

DATE: Tuesday, February 13th, 2024
MEETING TIME: 7:00 PM
PLACE: La Posada Rec Center & Zoom
MEETING SCHEDULE:
(6:30 ZOOM Waiting Room Available)
7:00 Meeting Intro and Welcome
7:10 Featured Presentation Followed
by Club Activities/Business

Next Member Star Parties

DATE: Thursday, February 7th, 2024
TIME: 5:45 PM
PLACE: Canoa Preserve Park

**LOOKING AHEAD -
THE FOLLOWING STAR PARTY WILL BE:**

DATE: Thursday, March 7th, 2024
TIME: 6:15 PM
PLACE: Canoa Preserve Park

NOTE: If you have a telescope that you don't know how to use, or are looking to buy a telescope and want to compare different telescopes, join us at a star party and we can give you some help.

UPCOMING EVENTS

NEXT CLUB MEETING

DATE: March 12th, 2024
LOCATION: La Posada Rec. Center
TIME: 7:00 P.M. (in person + Zoom)
Speaker: T B A
Subject: T B A

February Presentation

Speaker: Dr. Kevin Hainline

Subject: JWST: Our First Year Capturing Light from the Dawn of Time

Abstract: In this talk, University of Arizona astronomer Kevin Hainline will discuss the exciting first year of NASA's flagship space observatory: the James Webb Space Telescope (JWST). He'll share stories from his time working on the observatory and discuss highlights from the wealth of data that JWST has brought us: awe-inspiring planets, nearby nebulae, baby stars, and the farthest galaxies humans have ever seen.

Biography: Dr. Kevin Hainline is an astronomy professor and researcher on the James Webb Space Telescope (JWST) NIRCам science team at The University of Arizona's Steward Observatory. His research focuses on hunting for hidden supermassive black holes, and he's currently using JWST to find and understand the most extreme, distant galaxies in the early universe. He received his PhD from UCLA in 2012 and spent three years as a researcher and professor at Dartmouth College in New Hampshire before moving to Tucson to work on JWST. Kevin has a passion for science outreach education, and has spoken about astronomy and our relation to the stars at events around the world.

SONORAN STARRY NIGHTS

PRESIDENTS NOTES

Greetings everyone,

We will continue our live/ZOOM hybrid meetings at the La Posada Rec Center.

Our January club star party at Canoa Preserve Park got cancelled due to rather cold and windy weather. Hopefully February will be better. If you are a club member who needs a little help with your scope, bring it to the club star party and someone will try to assist you.

The Tucson astronomy club is picking up most of the public star parties we used to do, but they can have difficulty getting people this far south. Canoa Ranch will be holding numerous star parties. I would like to know if anyone would like to volunteer to assist TAAA. Please contact me if you think you could contribute.

Public star parties are still ongoing. There are no public star parties scheduled for February.

We are still looking for someone to step into the president's position. I won't live forever. To keep this club viable, we need people to step up and help out. Otherwise, it will not last.

Finally be sure to check out our website. Joe has done a great job to keep it relevant.

Stay safe,

John Dwyer
President

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MEMBER EQUIPMENT FOR SALE

Have a telescope or other astronomy equipment for sale? Contact John Dwyer with your item(s) to get them listed here.

The SAS website has a good one-page article from Sky & Telescope that can help get you started. Copy and paste this link:

<https://sonoraastronomicalsociety.org/newsletters/>

Basic monthly star charts are now available on the website Home page yellow banner.

The website also has a list of suggestions of Planetarium Apps for your phone, several FREE!

SONORAN STARRY NIGHTS

THE FEBRUARY SKY

SKY HIGHLIGHTS FOR FEBRUARY

Of the two big planets, only **Jupiter** will be in good shape for viewing this month. It is about due south at sunset and glows brightly at a magnitude of about -2.3. **Saturn** starts out extremely low in the southwest in the evening and by the end of the month, it will be in conjunction with the Sun. **Uranus**, still trailing about 10° behind Jupiter, is also well positioned for viewing at magnitude 5.7. **Neptune** is also losing its battle with the Sun and will reach solar conjunction in the middle of next month. **Mars** is rising a little higher in the morning sky. On the 22nd it will be within 0.6° of Venus. **Venus**, at just under -4.0, will rise at approximately 5:30am as it moves toward the Sun. **Mercury** is in the morning sky, but will be tough to see. It reaches inferior conjunction with the Sun on the 28th.

There are three comets under mag 10 now viewable. Comet **12P/Pons-Brooks** is a well-known short period comet. But since the summer it has undergone two outbursts which have dramatically increased its magnitude. These outbursts have distorted the comet to give it the appearance of horns sticking out from it resulting in the nickname of the “Devil Comet”. It will be rolling from Cygnus into Andromeda this month at about mag 8 but could reach mag 4 or better by April. Comet **62P/Tsuchinshan 1**, now located in Virgo at about 9th magnitude, reached perihelion at the end of December and is beginning to fade. Comet **C/2024 S3 (PanSTARRS)** will reach perihelion in mid-February. It is about 10th mag now and could reach 8th magnitude by then. However, it is very low in the southern sky going from Scorpius to Ophiuchus in February.

FEBRUARY MOON/SUN TIMES

DATE	M-Rise	M-Set	M-Phase	Sun-set	Star Party
Thu 02/01	0:24	10:52		17:58	
Fri 02/02	1:25	11:21	3rd Qtr	17:59	
Sat 02/03	2:27	11:55		17:59	
Sun 02/04	3:32	12:35		18:00	
Mon 02/05	4:37	13:24		18:01	
Tue 02/06	5:38	14:23		18:02	
Wed 02/07	6:31	15:32		18:03	
Thu 02/08	7:18	16:45		18:04	S.A.S. SP
Fri 02/09	7:58	18:00	New	18:05	
Sat 02/10	8:33	19:14		18:06	
Sun 02/11	9:05	20:25		18:06	
Mon 02/12	9:37	21:35		18:07	
Tue 02/13	10:09	22:43		18:08	SAS Meeting
Wed 02/14	10:43	23:51		18:09	
Thu 02/15	11:22	-----		18:10	
Fri 02/16	12:06	0:58	1st Qtr	18:11	
Sat 02/17	12:56	2:04		18:12	
Sun 02/18	13:51	3:07		18:12	
Mon 02/19	14:48	4:04		18:13	
Tue 02/20	15:48	4:55		18:14	
Wed 02/21	16:47	5:39		18:15	
Thu 02/22	17:44	6:15		18:16	
Fri 02/23	18:40	6:47		18:16	
Sat 02/24	19:34	7:16	Full	18:17	
Sun 02/25	20:27	7:41		18:18	
Mon 02/26	21:22	8:05		18:19	
Tue 02/27	22:17	8:29		18:20	
Wed 02/28	23:15	8:55		18:20	
Thu 02/29		9:22		18:21	
					(S)=Solar

SONORAN STARRY NIGHTS

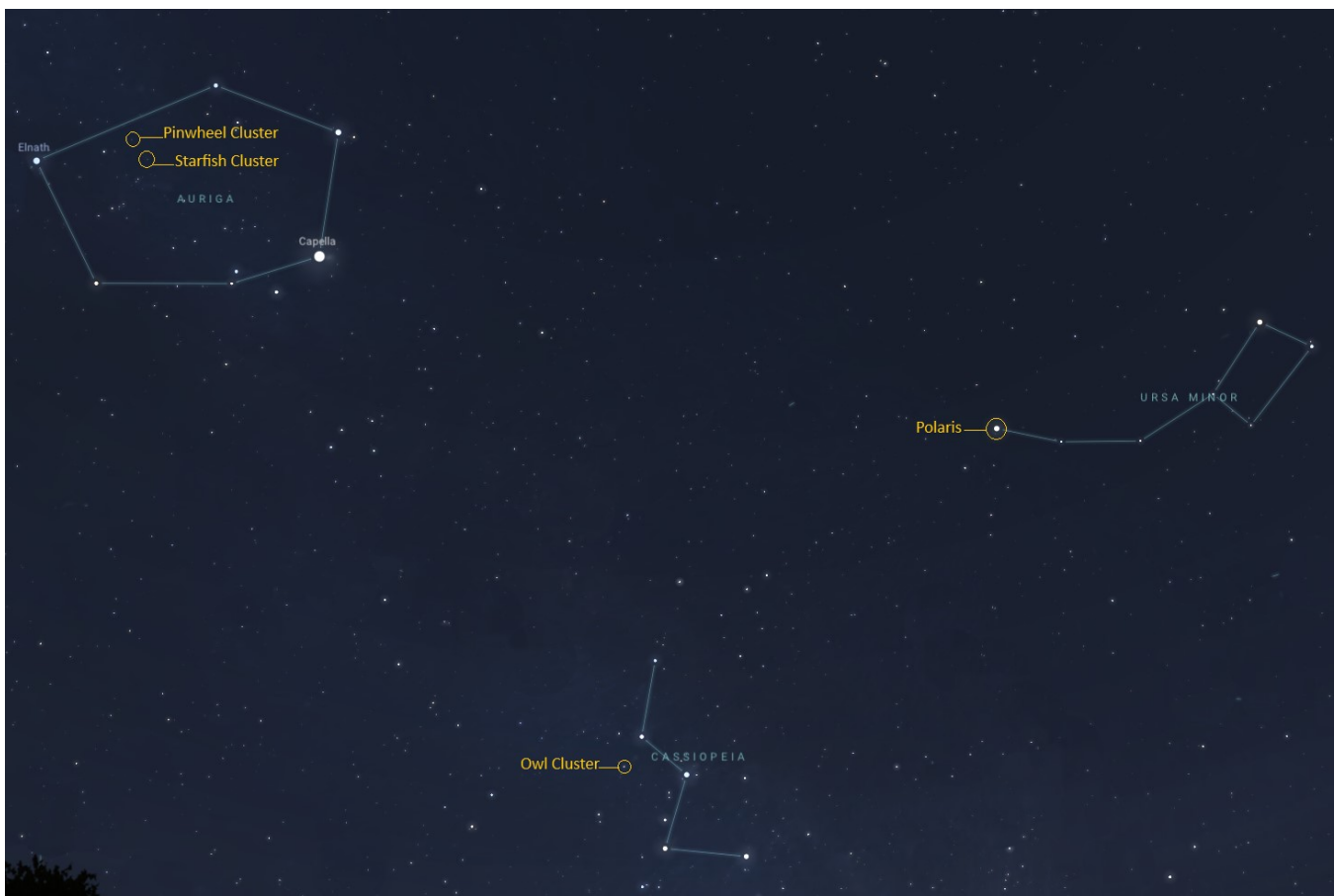
THE STARGAZER'S CORNER:

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

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.

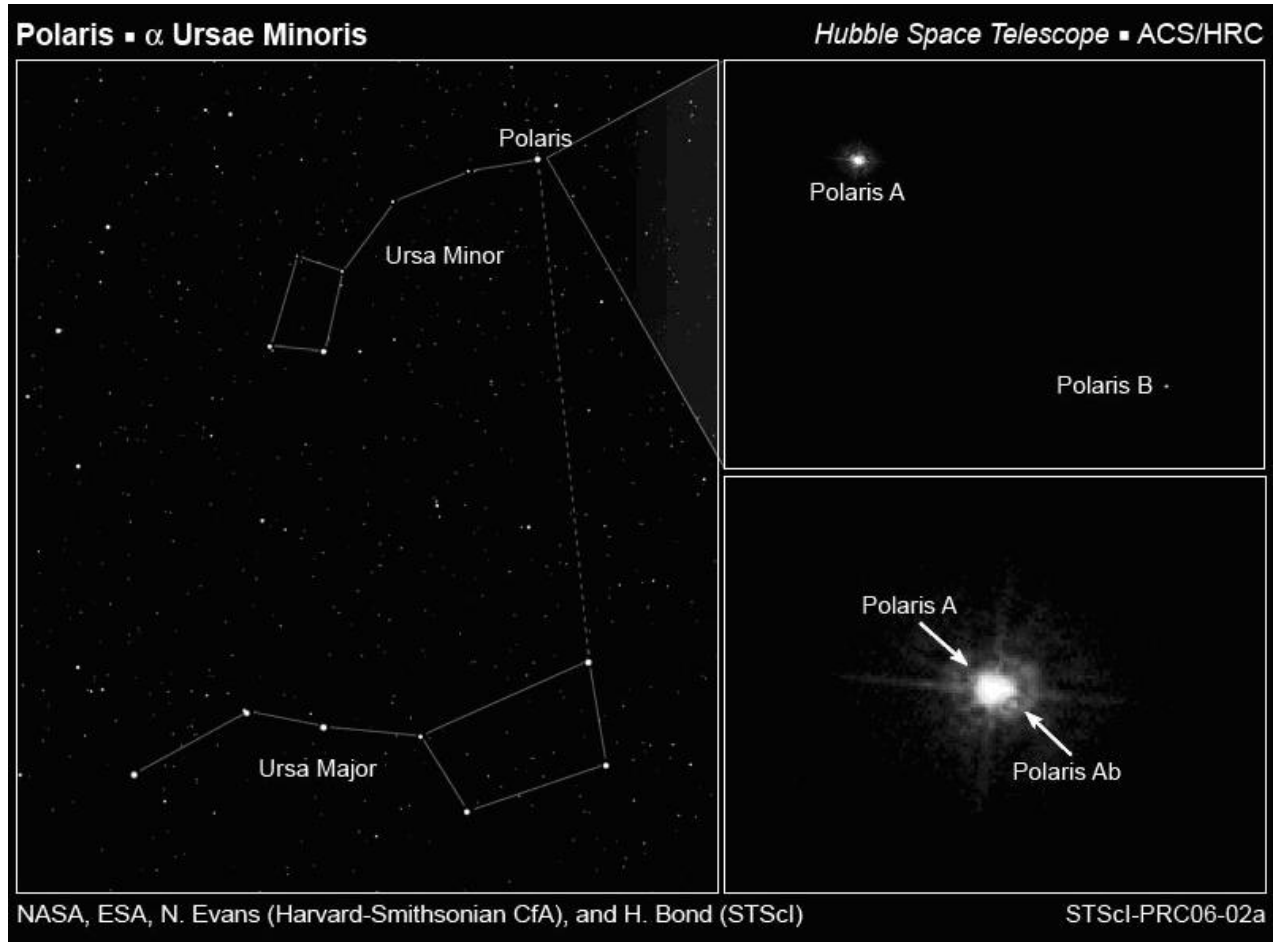
Credit: Stellarium Web

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.

.(Continued Next Page)

THE STARGAZER'S CORNER (CONTINUED):

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!

(The article will be posted on thr SAS website when available—keep checking)

SONORAN STARRY NIGHTS

S.A.S. CLUB OFFICERS

OFFICE/POSITION	NAME	PHONE NO.
Chairman of the Board	Open	
President	John Dwyer	(520) 393-3680
Secretary	Michael Moraghan	(520) 399-3352
Treasurer	John McGee	(520) 207-6188
Star party Coordinator	Open	(520) 303-6920
Newsletter Editor	Joe Castor	(620) 584-4454
Webmaster	Joe Castor	(620) 584-4454
ALCOR* (Currently Inactive)	Inactive	(520) 396-3576
NSN** Representative	Open	(520) 303-6920
Past President Emeritus	Open	
*Astronomical League		
**Night Sky Network		

WHY JOIN SAS

1. SAS Family Membership Fee is only \$15.00 per year.
2. SAS monthly newsletter "The Sonoran Starry Nights."
3. Top-quality astronomy lectures by local astronomers!
4. SAS Discount for Astronomy Magazine \$34.00 for 1yr or \$60.00 for 2 yr renewed through our treasurer.
5. SAS Discount subscription rate for Sky & Telescope Magazine — self-renewed.
6. RASC Observer's Handbook at a discount, \$30.00.
7. SAS T-Shirts for sale for \$10.00—M, L, XL.
8. Member of International Dark-sky Association (IDA).
9. SAS Discount for Astronomy 2020 Calendar \$10.00
10. SAS monthly Member Star Parties.
11. SAS Telescope and astronomy book loan programs.
12. SAS outreach to astronomy education in schools.
13. SAS fellowship with other amateur astronomers!

CLUB DUES

Dues (family or individual) are \$15 annually, payable each year in the month you initially joined the club. You will receive a reminder in the monthly newsletter e-mail of your due date. You can either pay at the club meeting or mail it to the club's address (S.A.S., P.O. Box 1081, Green Valley, AZ, 85622).

SAS WEBSITE

If you want to keep up-to-date with club activities, such as star parties, etc., check out our website (and Calendar) at:

[HTTPS://sonoraastronomicalsociety.org](https://sonoraastronomicalsociety.org)

SAS STATISTICS & FINANCES

Lifetime Members: 1
 Individual & Family Members: 112
Total Membership: 113

Bank Balance as of December 31: \$1,922.21
 Deposits / (D/Ws): \$120.00 / (\$25.00)
Bank Balance as of January 31: \$ 2,017.21

SONORAN STARRY NIGHTS

LOCAL ASTRO-IMAGING GROUP: Sonoran Desert Astro Imagers (SDAI) (Larry Phillips, Coordinator)

Are you interested in Astrophotography or are you currently involved in imaging the skies? Please plan to join our monthly meeting of the Sonoran Desert Astro Imagers group. Our meetings focus on improving our skills, helping each other, workshops, and field trips. Please send your Name and E-mail address to my address below and we'll include you in the emailing notices of monthly meetings; "the when and where meeting notice." Do you have any questions? If so, call me (Larry Phillips) at (520) 777-8027 or email to llp41astro@cox.net. Clear Skies! Larry Phillips

ABOUT THE ASTRONOMICAL LEAGUE



While SAS is no longer an active member of the Astronomical League, a SAS member may join the Astronomical League as an at-large member. What are the advantages to joining the AL?

1. You can receive various observing awards by joining an "observing club" and observing the required number of objects. There are all levels of clubs from beginner to advanced, viewing constellations to deep-sky objects and using either your naked eyes, binoculars, or a telescope. Contact our ALCOR rep Burley Packwood for details.
2. You can get a 10% discount on books purchased through the AL Book Service.
3. You will receive the AL's quarterly "Reflector" magazine which keeps you up to date on all the AL activities.

More info at www.astroleague.org

SAS IS A MEMBER OF IDA



SAS is proud to be a member of the International Dark-Sky Association, supporting the reduction in light pollution around the U.S. and the world. More info at www.darksky.org

SAS NON-PROFIT STATUS

The Sonora Astronomical Society is a 501 (c) (3) nonprofit charitable organization! SAS has a CERTIFICATE OF GOOD STANDING from the State of Arizona Corporation Commission!

MAGAZINE SUBSCRIPTIONS

To renew your Sky and Telescope Magazine at the Club Rate, you can go directly to their website, or to order it new, or to order or renew Astronomy Magazine, contact the Club Treasurer.

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