



# THE OBSERVER



[Gene Robinson - New to solar Imaging](#)

## UPCOMING EVENTS:

GRCO Monthly Star Party - Apr. 11<sup>th</sup>  
 EVAC Monthly Club Meeting - Apr. 18<sup>th</sup>

For more details, and to see all of the upcoming club events, check out the [events page](#) on our website or the [Calendar](#) page of this newsletter.

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## From the Desk of the President

*by Steve Bradshaw*

I like belonging to an astronomy club. Especially a large and active one like the East Valley Astronomy Club. I hope that you do too. One of the features of club membership that I enjoy is that there is always something to do or to look forward to doing. This article is intended to highlight the club activities that provide you with things to do.

Of course, it wouldn't be a club without meetings so once each month we have our club meeting. Not only do we get the opportunity to gather socially with fellow members, but we also learn new things from other members. In just the first three months of this year, one member has taken us on a journey back through the last 70 years of astronomy highlights. From another member we learned some new things about the Andromeda galaxy. Other members have shared informa-

tion about telescopes including the pros and cons of the SeeStar S50 and S30 model telescopes, how to check telescope collimation, and we learned about intensity interferometry using small telescopes.

Our monthly club meetings also feature main speakers who have provided an interesting mix of topics too. So far this year one described the life of a person who does full time astronomy outreach. I learned, for example, that you can get a free cruise just by providing a few lectures. That sounds awesome, sign me up. Two other speakers spoke to us about asteroids. The first spoke to us about where asteroids come from, what they are made of, their trajectories, and how they are studied. That presentation was almost a primer for the next speaker who spoke to us specifically about the NASA Psyche

# From the Desk of the President

by Steve Bradshaw

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mission to explore the Psyche asteroid.

But attending monthly club meetings is not all that you can do with the club. You can join other members at regular viewing events too. On many weekends you can find club members gathering at the Picket Post trailhead site to view or image together. Picket Post events are typically advertised on our Facebook page and mailing list. As I write this article, a group of members and I are attending the Messier Marathon at the Hovatter Road site. We have been solar viewing during the day, viewing at night, and hanging out socializing and “talking shop” during the day. Friday night’s viewing was cut short by clouds, but the viewing Saturday night was great. Kent Bell, one of our EVAC members, managed to get 109 of the 110 Messier objects.

The club also has additional large group viewing events planned for later in the year. In September the club is planning to host another event at the Hyman Rim Ranch on the Mogollon Rim. Dates and details will be announced later. In October the club will also host this year’s edition of the All Arizona Star Party at the Hovatter Road site.

Still need something else to do? Well then there are also public outreach viewing events almost weekly during the cooler months of the year. We regularly meet with other members at schools, community centers, neighborhoods, and science centers to view the sky and share the sky and our telescopes with the public. All year round you can also volunteer time at the Gilbert Rotary Centennial Observatory on a Friday or Saturday evening.

If meetings and viewing events were not enough, the club is now pursuing group trip opportunities as well. Earlier this year about 90 of us met at Arizona State University in Tempe to enjoy a tour of their space and science museum and to watch their 3-D planetarium show in the Marston

Theater. Salad, pizza, cookies, and a raffle topped off the ASU event. But the ASU event was not the only planned event this year.

We are planning another group trip this summer. The plan is to board a chartered shuttle bus at the Southeast Regional Library in Gilbert and drive to a 90-minute tour of the Richard F. Caris mirror fabrication lab at the University of Arizona in Tucson. The mirror(s) we will see are not 6 or 10-inch mirrors either, but rather 6 or 10-meter mirrors. On the same trip we are also going to take a 90-minute tour of the Space Imagery Center, also at the University of Arizona in Tucson. Then we’ll have lunch in Tucson before our shuttle bus takes us back to Gilbert.

The Board is also discussing other group trips as well so stay tuned.

The club also tries to create things for newer members to do as well. At least twice each year one of our members runs a multi-week lecture-lab astronomy class for beginners. It includes several evening lectures via Zoom and several evening group practice sessions with telescopes. There is one running right now with 20 people attending.

The point of this article is that if you are looking for something to do then the club offers a variety of activities throughout the year. Whether you want to socialize with others who share a common interest, to view together, to take images together, to get advice, to take astronomy-related trips, to learn in classes together, or to get involved in public outreach, the club has something for you. And we are always open to more ideas and suggestions for other activities too.

Until next month enjoy looking up, learning, and connecting with others,  
Steve

**First Quarter Moon on April 4<sup>th</sup> at 7:14 PM**

**Full “Pink” Moon on April 12<sup>th</sup> at 5:22 PM**

**Third Quarter Moon on April 20<sup>th</sup> at 6:35 PM**

**New Moon on April 27<sup>th</sup> at 12:31 PM**

# EVAC Outreach Events

by Alice Klobe

## April Star Parties:

- April 3<sup>rd</sup> - 6:30 PM til 8:00 PM - Leading Edge Academy Mesa Star Party
- April 11<sup>th</sup> - Sundown til 9:30 PM - EVAC/GRCO Monthly 2<sup>nd</sup> Friday Star Party
- April 24<sup>th</sup> - 7:30 PM til 8:30 PM - Pinal County Government/Peralta Regional Park Star Party
- April 29<sup>th</sup> - 7:30 PM til 8:30 PM - Patterson Elementary School Star Party
- April 30<sup>th</sup> - 7:40 PM til 9:00 PM - CCMC -Fulton Homes At Cooley Station HOA

Details can be found on the EVAC website - [evaconline.org/events-meetings](http://evaconline.org/events-meetings).

Updates, reminders, etc. associated with outreach events are done via email. To sign up and receive these emails go to [freelists.org/list/evac-outreach](http://freelists.org/list/evac-outreach) to be added on the mailing list.

## Just a few reminders for all star party events:

1. After signing up on the EVAC outreach email list, always check your email before leaving for an event for any updates, changes, or cancellations.
2. Arrive early enough to have your equipment setup before start time of the event.
3. For safety reasons, we do not allow any public viewing until the sun is completely below the horizon.

# EVAC Monthly Club Meeting Minutes - March 21, 2025

by Jeff Foreman

## Meeting Minutes

YouTube: Many EVAC monthly meetings can be viewed on YouTube. Just search for the East Valley Astronomy Club on the YouTube website to locate the recordings, or select this [link](#) for the recordings.

## Welcome

EVAC president Steve Bradshaw welcomed club members to the meeting and reviewed the agenda. New visitors were recognized and welcomed.

## Announcements

- **Visitor Recognition:** 6 new visitors
  - We had 70 people in attendance and 37 on the Zoom call
- **EVAC Website Highlights** (<http://eastvalleyastronomy.org/>)
- **Gilbert Rotary Centennial Observatory** (GRCO)
  - Friday and Saturday (weather permitting) dusk to 9:30 PM
  - 2<sup>nd</sup> Friday of every month is the public star party with members telescopes
- **Public Outreach Events (Alice Klobe)-Events Coordinator**
  - Recent Public Star Party Events-Alice shared photos of volunteers at four recent events, including the lunar eclipse at GRCO.
  - Explained what happens at these public outreach events.
  - Listed upcoming Public Star Party Events. (Can be found on the [EVAC Calendar](#))

# EVAC Monthly Club Meeting Minutes - March 21, 2025

by Jeff Foreman

Continued from page 3

## • Club activities

- 2025 Messier Marathon-2 nights
  - Friday and Saturday, March 28<sup>th</sup> and 29<sup>th</sup>.
  - Hovatter Rd off the I-10 near Quartzsite.
  - Friday- Just the marathon
  - Saturday-Swap meet, raffle for prizes, and dinner for \$8.
- Fountain Hills Dark Sky Festival
  - Saturday March 29, 4pm-9pm
  - Volunteers from the club are welcome to go and set their scope for the festival attendees.
- Starry Rewards Luncheon
  - October 11, 2025 from Noon to 1:15 PM
  - Rancho de Tia Rosa Mexican Restaurant on the Northeast corner of Higley Rd. and Guadalupe Rd.
- Peralta Regional Park Picnic?
  - Steve took a straw poll of the meeting attendees and there was some interest.
  - Family picnic some time in April
  - Potluck with outdoor activities and telescope viewing)
  - 4 - 10 PM

## **Member Presentation: SeeStar Showdown S30 vs. S50 (Alice Klobe)**

Alice presented a comparative analysis of ZWO's SeeStar smart telescopes, the S50 and S30. She detailed her journey of interest in these devices, followed by a direct comparison of their features, pricing, and images. She concluded with a personal assessment of their respective strengths, weaknesses and her personal preference.

## **Member Presentation: Telescope Collimation: What is it? (Gordon Rosner)**

Gordon explained collimation, demonstrated how to check a telescope's collimation, and showed how to create an artificial star using a flashlight and foil.

## **Feature Presenter: Psyche: Exploration of a Metal World ( DR, David Williams)**

Dr. David Williams is the coinvestigator and deputy lead for the multi-spectral imager on the NASA Psyche mission. Several topics were discussed. NASA's Psyche mission to asteroid 16 Psyche, including mission goals, spacecraft development, and the 2023 launch.

## EVAC Starry Rewards Outreach Volunteer Recognition Program

### **Rewards Luncheon scheduled for October 11<sup>th</sup> from Noon to 1:15 PM at Rancho de Tia Rosa**

According to the score sheet, the following club members have accumulated the required 10 points for the luncheon: Alice Klobe (17), Claude Haynes (13), David Patroit (10), Don Wrigley (11), Gordon Rosner (17), Josh Eyre (10), Steve Bradshaw (12).

These members have between 5 and 9 points and still have plenty of time to qualify by October: Adam Baum (9), Brooks Scofield (9), John Dunegan (8), Yesenia Galeana (6).

And these members have between 1 and 4 points: Andrea Matthias (3), Andrew Thorpe (1), Bill Dellinges (3), Brandon Feldman (2), Chris Giles (3), David Kennerly (2), Dennis Miller (1), Derek Youngson (1), Jake LeAlcala (2), Jeff Foreman (3), Jeff Hardee (4), Jessica Ayala (3), Joaquin Sanchez (3), John Flynn (4), Jonathan Eskey (2), Kaylin Washburn (2), Kearan Gibbs (3), Kent Bell (1), Michael Nixon (2), Morgan Moran (3), Nathan Eskey (2), Nicole Park (2), Orlando Payne (4), Rachel Neglia (1), Rick Warburton (4), Rick Wilt (2), Steve Feist (4), Ted Blank (2), Tom Mozden (1), Tom Polakis (1), Wayne Thomas (1).

# Deep Sky Imaging Target Highlights for April 2025

from [starwalk.space](http://starwalk.space)

The average low [temperature](#) for April in the Phoenix metro area is 60° F. April 27<sup>th</sup> is a new moon with astronomical dusk at 8:09 PM and astronomical dawn at 4:57 AM, giving us 8 hours and 48 minutes of imaging time that night.

We are right in the middle of “Galaxy Season” (March through May) as many deep sky objects position themselves high in the night sky. I have used StarWalk to identify 5 galaxies, 2 galaxy groupings, and 1 amazing star cluster that make fantastic targets to explore in April. Below is a list of Northern Hemisphere targets with links to more information.

Deep Sky Object and Link	Apparent Magnitude	Constellation	How to Observe
<a href="#">Markarian's Chain</a>	8.9 - 12.9	Virgo	The bright members of the Markarian's Chain are visible through small telescopes. Large telescopes are required to view the fainter galaxies.
<a href="#">Leo Triplet</a>	8.9 - 9.5	Leo	With 10x50 binoculars, you will most likely only be able to see two of the three galaxies in the Triplet — M65 and M66. They will appear as hazy smudges. You may try to spot the third galaxy, NGC 3628, with averted vision, but it won't be an easy task. To see the whole Leo Triplet in one field of view, you'll require at least a small 4-inch telescope..
<a href="#">Cat's Eye Galaxy</a>	8.2	Canes Venatici	On a clear night, the Cat's Eye Galaxy can be spotted with binoculars — but only as a small patch of light. Even with small telescopes, this object is discernible as a galaxy.
<a href="#">Pinwheel Galaxy</a>	7.9	Ursa Major	Under dark skies, you can easily observe the Pinwheel Galaxy with 10x50 binoculars. Some astronomers even say this galaxy is easier to find with binoculars than with a telescope.
<a href="#">Whirlpool Galaxy</a>	8.4	Canes Venatici	In large binoculars, the Whirlpool Galaxy appears as a small nebulous spot. With an amateur telescope, the galaxy's impressive spiral structure reveals itself.
<a href="#">Sombrero Galaxy</a>	8.0	Virgo	You can see the Sombrero Galaxy even through small binoculars — it will look like a small oval smudge of light. If you want to get the best view of its hat-like shape, you should use at least a 10- or 12-inch telescope.
<a href="#">Needle Galaxy</a>	10.42	Coma Berenices	The Needle Galaxy is a challenging object to spot with binoculars. Through a small telescope, it appears as a thin nebulous line with a hint of a central bulge.
<a href="#">M3</a>	6.39	Canes Venatici	The M3 cluster is very difficult to see with the naked eye, even with averted vision. However, it's easily visible with 10x50 binoculars.

# Used Equipment For Sale at Great Prices

The East Valley Astronomy Club (EVAC) has used astronomy equipment for sale. Please note that equipment sales are **“as is”** and are **“pick-up only”**.

For more details and to answer any questions, contact the EVAC Property Director, James Yoder ([properties@evaonline.org](mailto:properties@evaonline.org)) or visit the EVAC Sales webpage [HERE](#). This page includes a brief description of the items, photos and reference materials (e.g. users manuals, etc.).

Equipment being offered for sale this month includes:

- [Meade LX-50 8" SCT Telescope Kit](#) (Sale Price = \$450)
- [Celestron Astro Fi 90mm Refractor Telescope Kit](#) (Sale Price = \$150)
- [Unitron 102mm Refractor Telescope](#) (Sale Price = \$75)
- [Odyssey 12" Dobsonian Telescope](#) (Sale Price = \$125)
- [Celestron Eyepiece Kit: Case, 4 Eyepieces, 6 Color Filters](#) (Sale Price = \$100)
- [Thousand Oaks Type 2 Solar Filter ID=308mm](#) (Sale Price = \$50)

Non-EVAC Equipment for Sale (This is mostly member sales, EVAC is neither responsible for, nor endorses this equipment).

- [ZWO Carbon Fiber Tripod and Pier Extension](#) (Sale Price = \$375)

## EVAC Equipment Rental Program

Equipment rental is available to East Valley Astronomy Club (EVAC) members. Equipment rental rate is \$25/week for up to four weeks at a time. The following equipment is available:

### Telescopes

- [Celestron C-8 with Nexstar GoTo mount](#) (Telescope Package SCT01)
- [Celestron 10" Dobsonian Telescope](#) (Telescope Package DBB01)

### Imaging Packages

- [SeeStar S50 All-In-One smart telescope](#) (Imaging Package S50)
- [Planetary & Moon Imaging Kit](#) (Imaging Kit 01)

### Visual Filters Kit

- [Twelve 1.25" filters for deep sky objects](#) (Filters Kit VFR01)

### EVAC Equipment Restrictions and Requirements

- Must be EVAC member in good standing (dues are current).
- Rent is on a weekly basis and not to exceed four consecutive weeks.
- Equipment Pick-up and Drop-Off location and times will need to be coordinated with the EVAC property manager.
- Rental fee is due upon pick up of equipment.
- A security deposit is required for equipment being rented (see equipment details for amount).
- Each package has an associated Rental Agreement that must be completed and signed.

Select [THIS LINK](#) to submit a request to reserve equipment.



SkyPi Remote Observatory

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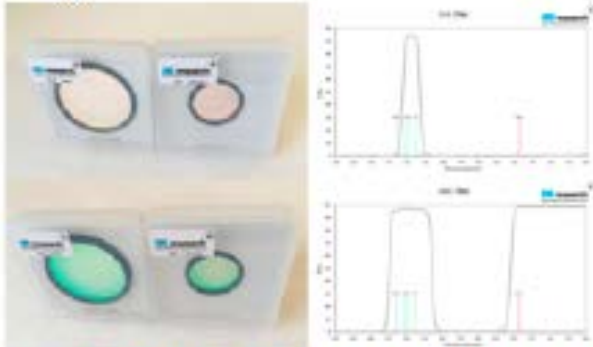
# Apache-Sitgreaves Observatory

Overgaard, Arizona

Largest Public  
Observing  
Telescope  
in  
Arizona



Critical products for visual observing, too!



A-S Research Nebula Filters: See More Nebulosity!

The complex block contains the main title and location, a photograph of a man standing next to the massive Apache-Sitgreaves telescope, and a section for nebula filters. The filter section shows four filters in their packaging and two spectral graphs. The graphs show transmission curves for different filters, with one showing a very narrow bandpass and another showing a wider bandpass.

[www.apache-sitgreaves.org](http://www.apache-sitgreaves.org)



Monthly Meetings will be held in person and also presented live online using Zoom. See the EVAC Website for updates.

The monthly general meeting is your chance to find out what other club members are up to, learn about upcoming club events and listen to presentations by professional and well-known amateur astronomers.

Our meetings are held on the third Friday of each month at the Southeast Regional Library in Gilbert. The library is located at 775 N. Greenfield Road; on the southeast corner of Greenfield and Guadalupe Roads. Meetings begin at 7:00 pm.

Meetings are also available online via Zoom.

***Visitors are always welcome!***



Southeast Regional Library  
775 N. Greenfield Road  
Gilbert, Az. 85234



## April 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	<b>3</b>	4	5
6	7	8	9	10	<b>11</b>	12
13	14	15	16	17	<b>18</b>	19
20	21	22	23	<b>24</b>	25	26
27	28	<b>29</b>	<b>30</b>			

**April 3<sup>rd</sup>** - 6:30 PM til 8:00 PM - Leading Edge Academy Mesa Star Party

**April 11<sup>th</sup>** - Sundown til 9:30 PM - EVAC/GRCO Monthly 2<sup>nd</sup> Friday Star Party

**April 18<sup>th</sup>** - 7:00 PM til 9:00 PM - EVAC Monthly Meeting

**April 24<sup>th</sup>** - 7:30 PM til 8:30 PM - Pinal County Government/Peralta Regional Park Star Party

**April 29<sup>th</sup>** - 7:30 PM til 8:30 PM - Patterson Elementary School Star Party

**April 30<sup>th</sup>** - 7:40 PM til 9:00 PM - CCMC -Fulton Homes At Cooley Station HOA

## May 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	<b>9</b>	10
11	12	13	14	15	<b>16</b>	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

**May 9<sup>th</sup>** - EVAC/GRCO Public Star Party - Sunset-9:30 PM

**May 16<sup>th</sup>** - EVAC Monthly Meeting 7-9 PM

# East Valley Astronomy Club - 2024 Membership Form

## Member Dues (Based on the month you are joining the club)

	Individual	Family	Student (18yr+ with ID)
January - June	\$30.00	\$35.00	\$20.00
July - December ( <i>Renew in January</i> )	\$15.00	\$20.00	\$10.00
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Renewal Dues (Current Members Only)

Astronomical League: \$10.00 Annually:

Individual	Family	Student (18yr+ with ID)
\$30.00	\$35.00	\$20.00
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Name Badges:      Quantity: \_\_\_\_\_

\$10.00 Each

Name to imprint: \_\_\_\_\_

Total amount enclosed:

Please make check or money order payable to EVAC.

Payment will be made using PayPal:

Name:

Phone:

Address:

Email:

City  
State  
Zip

URL  
For website:

Would you be interested in our outreach program?      Yes       No

How did you discover East Valley Astronomy Club?

## Liability Release Form

In consideration of attending any publicized Star Party hosted by the East Valley Astronomy Club (hereinafter referred to as "EVAC"), the receipt and sufficiency of which is hereby acknowledged, I hereby affirm that I and any related entities, predecessors, successors, affiliates, attorneys, guarantors, insurers, transferees, assigns, parents, spouses, children, subsidiaries, accountants, officers, directors, employees, agents, shareholders, members, and trustees, past and present, hereby forever release, acquit and discharge to hold EVAC and its related entities, predecessors, successors, affiliates, attorneys, guarantors, insurers, transferees, assigns, parents, spouses, subsidiaries, accountants, officers, directors, employees, agents, shareholders, members, and trustees, past and present, from any and all causes of action, claims, losses, damages, liabilities, expenses (including attorneys' fees) and demands of any nature whatsoever, known or unknown, that in any way relate to, arise out of, or concern EVAC and/or my presence on the premises of any EVAC Star Party and related areas, whether or not those causes of action, claims, damages, liabilities, and demands are part of the specific subject matter of EVAC or any EVAC Star Party. This release is intended to and does cover all injuries and damages, and the consequences thereof, whether known or unknown at the time of the execution of this release, which have occurred or may hereafter occur or which may hereafter be discovered, and which may have been caused or may be claimed to have been caused by the said incident, and specifically includes, but is not limited to, bodily injuries, mental and emotional injury, pain and suffering, medical treatments, and loss of earnings or income.

My signature upon this form also indicates agreement and acceptance on behalf of all minor children (under 18 years of age) under my care in attendance. EVAC only recognizes those who are members or invitees and who also have a signed Liability Release Form on file as participants at an EVAC Star Party.

Signature \_\_\_\_\_

Date \_\_\_\_\_

## Find Out What's Happening – Join EVAC-Announce List

If you would like to receive email announcements about EVAC meetings and activities, please join the EVAC–Announce mailing list. Click on the link below to subscribe. Enter your full email address in the box titled User Options and press OK. You will receive a confirmation email. Your privacy is respected by EVAC and we will never sell your email address, or use it for non-club relevant solicitations. This mailing list is designed for communication from EVAC, and does not enable users to respond to the message. If you wish to contact club officers, please use the list in the Contact-Us area on the Home page of our EVAC website. To subscribe to the EVAC–Announce mail group click: <http://www.freelists.org/list/evac-announce>. To unsubscribe use the same link, enter your email address and select Unsubscribe from the “Choose An Action” list. Another list to consider is AZ-Observing@groups.io, simply click on this link <https://groups.io/g/AZ-Observing> and follow the instructions. EVAC also has a Facebook Group where members may share ideas, photos, and Astronomy related information. Click on the link to join: [East Valley Astronomy Facebook Group](#).

The Gilbert Rotary Centennial Observatory (GRCO) also has a Facebook Group. To visit, please click on [Gilbert Rotary Centennial Observatory - GRCO](#). The Observatory is open on Friday and Saturday from sunset until 9:30pm. We need volunteers. Training is provided. Help us engage the community in the wonders of the night sky. Email [gco@evaonline.org](mailto:gco@evaonline.org) for information.

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[www.evaonline.org](http://www.evaonline.org)

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*Property Director: James Yoder*

*Refreshments: Open*

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*AL Representative: Brooks Scofield*

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