www.holland-saaa.org

The Shoreline Observer
September 2025

CLUB NOTES

In this issue:

SAAA 2026 Presentations

Dear members,

As a board we are already planning ahead for the new year 2026. Something we have to arrange quickly is the Hemlock Crossing Park presentation program.

So far we found topics and presenters for a part of the year 2026, but some months are still open. **Would like to participate and give a presentation on an astronomical topic for the month of May or November 2026?**

Please help out the club and let me or Barry Schoenfelner know.

Thanks in advance for your support.
Kind regards,
Karl Rijkse, President SAAA

Hello Members,
We've been busy with various projects this summer. Here's an update on their progress:

—Allsky Camera: Jim Reier evaluated the free INDI-allsky software and found it to be excellent for our needs. A ZWO camera with lens and Raspberry Pi 5 computer arrived promptly, but some additional electronics items took an unexpectedly long time to find their way to us from the supplier in Spain. An appropriate housing is still being sourced.

—Electronically Assisted Astronomy rig: The EAA/Guidescope rig is now mounted on the LX600 16" SCT. Frank Roldan assembled a sturdy mounting system. We've been using it on Public Observing nights to display images on a TV screen outside the dome. A dozen or more people crowd around to watch detailed images of galaxies and clusters grow in over a few minutes.

—Dome modifications and repairs: Cables to raise and lower the slit were replaced and modifications were made to the pulley system to make it more robust. Some preventative maintenance measures are also in progress for the dome rotation system.

—"Meteors and S'mores" at Holland State Park for the Perseid meteor shower peak on August 12th was a bust this year. State Park officials cancelled due to weather conditions.

Please welcome Dave Lesh as the new keyholder for observatory operations. Dave replaces Harold Reitsema in the keyholder rotation and has been avidly utilizing the scope and camera to produce some great astrophotos.

On September 6th, our Observatory Director, Frank Roldan, will present a talk on "The Fall & Winter Sky" at the Hemlock Crossing Nature Center at 7pm. A public observing session will follow the talk if sky conditions permit. We'll try to have the new EAA setup running too, so please come and check it out.

It's back to school time and SAAA meetings resume in the Macatawa Bay Middle School planetarium, too. Please join us September 11th at 7pm to catch up on events over the summer, enjoy a presentation on "The Moon" by Dave Lesh, and watch an entertaining NASA video on the conception, success, and demise of the Ingenuity helicopter on Mars.

SAAA will celebrate Astronomy Day on October 4th instead of September 27th to coincide with our monthly Hemlock Crossing program. Volunteers are needed throughout the day to help set up and coordinate activities. Extra scopes to view the moon and other bright objects would be very helpful after the evening talk. Anyone willing to display and explain their scopes and other astronomy related materials in the Nature Center during the afternoon session would be greatly appreciated too. Please contact me to volunteer - bschoenfelner@holland-saaa.org

Let's hope September brings cooler weather and clear skies untainted by wildfire smoke.
Barry Schoenfelner, SAAA Vice President

Calendar and Upcoming Events

Public Observing

When Every FRI evening starting at sunset (weather permitting) and on first SAT during the summer. See immediately below for start times.

Where Hemlock Crossing Public Observatory, 8115 W Olive Rd, West Olive, MI 49460, USA

Description The observatory is open from our start time until 11 PM (weather and clear sky permitting, see note after October 14th). There are no entry fees. Please be aware that the park gate closes automatically at 10 PM sharp, therefore visitors must arrive before 10 PM to enter the park. You will be able to leave as you wish.

Visible night sky objects: planets, the Moon, deep sky objects like galaxies, star clusters and planetary nebulae.

Friday Night (and First Saturday) Viewing Times

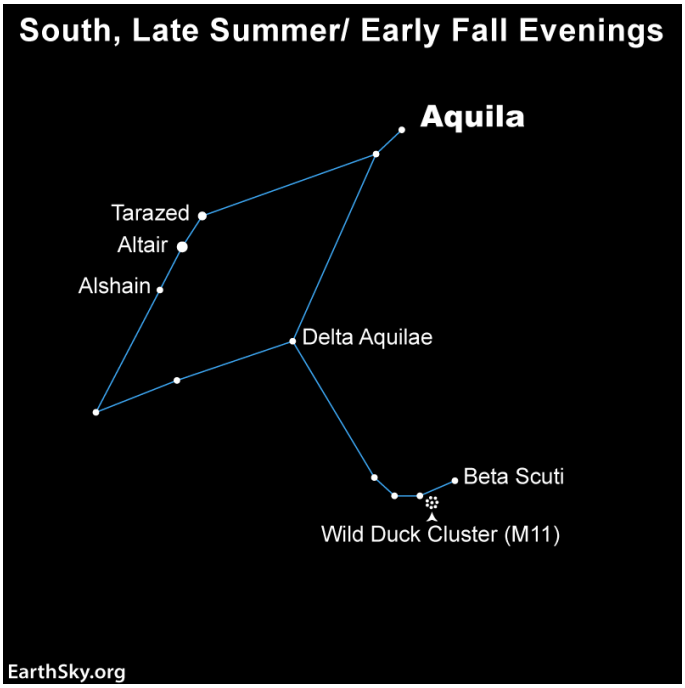
7pm	January ~ March	**9pm**	**June ~ September**
8pm	April ~ May	7pm	October ~ December

September 2025 Dates and Times

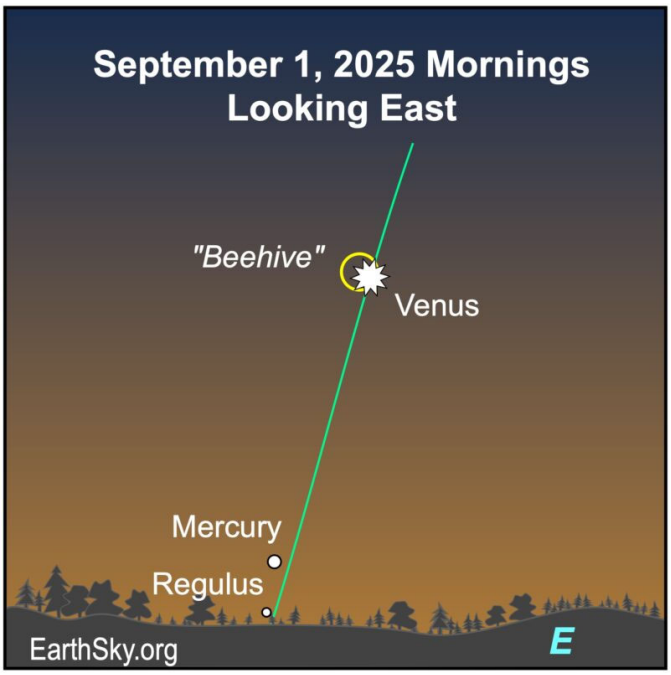
September 2025 Muskegon Club

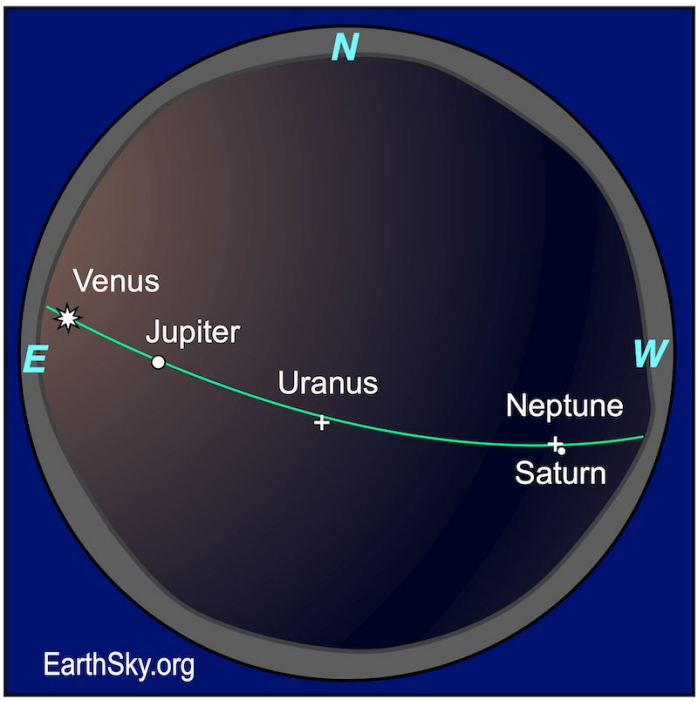
Tuesday September 9, 2025	MAS Membership Meeting	MAS Observatory	7:30 PM
Saturday September 13, 2025	Public Open House. Presentation in Club House Topic: Our Solar System Mike Cortright NASA/JPL Solar System Ambassador	MAS Observatory	Presentation - 7:00 PM Open House - 7:30 PM NOTE: If Cloudy Event Is Cancelled.
Tuesday, October 14, 2025	MAS Membership Meeting	Zoom Meeting	7:30 PM

What's in the Sky this Month: September

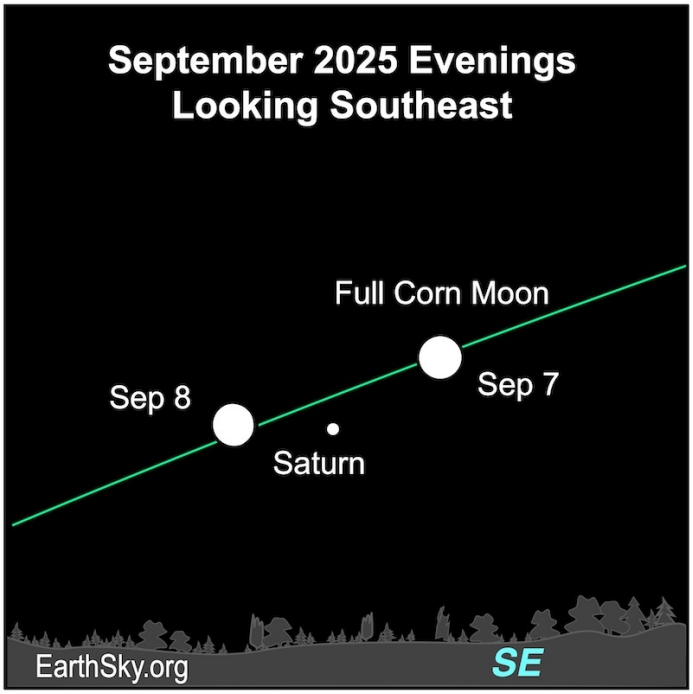


Aquila the Eagle is home to the star Altair, which is one of the corners of the Summer Triangle. In addition, you can also use Aquila to star hop your way to the Wild Duck cluster in Scutum the Shield. Image via EarthSky.





Binoculars (or other visual aid) may be needed for the directly above sighting in the mornings.



This Month in Club History September ‘89

Astronomy & Computers

If you own a personal computer and a telescope, have you ever dreamed of the day you could sit back in the comfort and warmth of your home and remotely control your scope? Have the images displayed on your monitor and capture them to disk, image process them, etc. Well, this may no longer be only in the realm of the professionals.

As I was contacting a few astronomy related bulletin boards recently (listed in Septembers' *Sky and Telescope* magazine, I found that Star Net (located in the Minneapolis/St. Paul area) is offering to subscribers that very opportunity. Evidently, all you need is your computer and modem, and some amateur scopes which are computerized will be available for you to conduct your own observing session! I don't know where the telescopes are located, but you can observe through your *computer,* regardless of your local sky conditions.

The current issue of *The Reflector* is advertizing a new BBS. If you have a computer and modem, check it out!

R.W.

RW is Dr. Robert Wade

<then

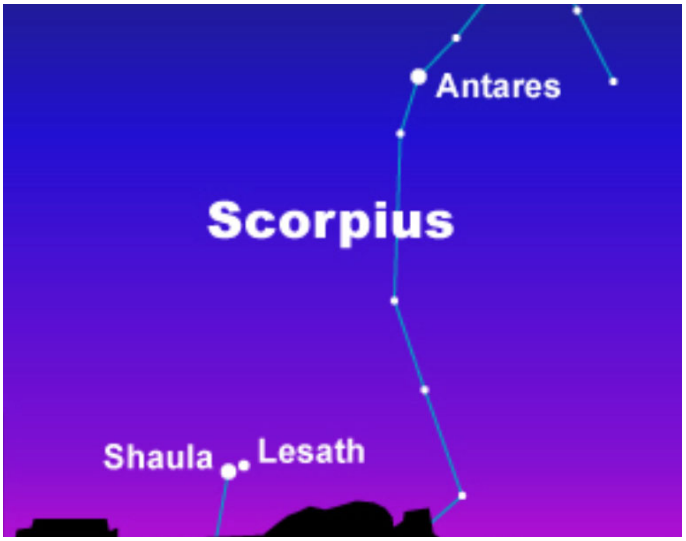
vs

now>

Editor’s Note: I had a computer and modem in ‘89...so I thought the comparison to what we could do then, vs. what is available now...above is from https://theskylive.com/planetarium and used without permission, but giving them full credit (link is not hot).

What Star am I?

Seeming to fly up the Milky Way
This eagle has not landed
A member of the summer triangle
Yet presiding over autumnal evenings
The Dumbbell is a neighbor
Once you find it, you’ll be glad you planned it
What star am I? - answer in next month’s newsletter



August’s star answer: “Shaula”
Picture (Rt) from EarthSky.org

This Month in Astronomy History

September 1: Pioneer 11 is first spacecraft to fly past Saturn - 1979
September 3: Last two Apollo Moon landings canceled by NASA - 1970
September 8: Voyager 1 launched - 1977
September 10: Surveyor 5 lands on Moon - 1967
September 23: Premier of “The Jetsons” - 1962
September 25: 59 - day Skylab 3 mission ends - 1973

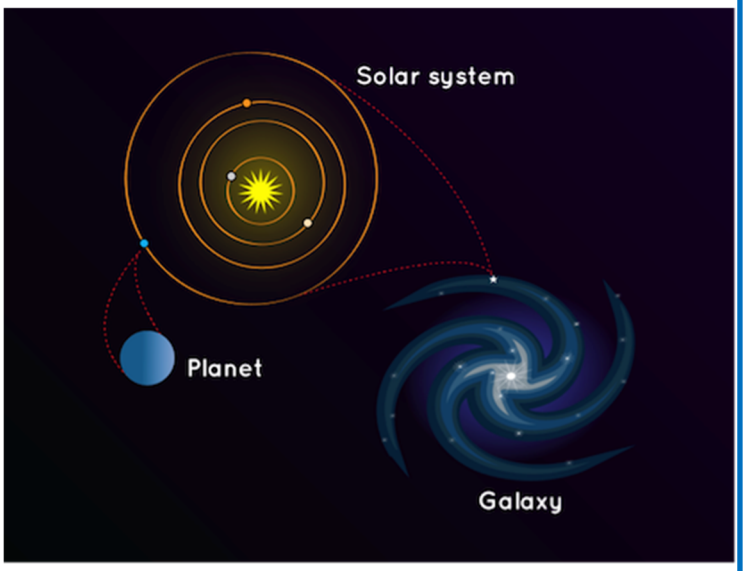
Kids Corner

https://spaceplace.nasa.gov/ A place where kids and grown-ups have fun with chnology.

NASA Climate Kids: It's all about climate.
https://climatekids.nasa.gov/

SciJinks: It's all about weather! https://scijinks.gov/

Kid's Corner Extra: What is a Galaxy?



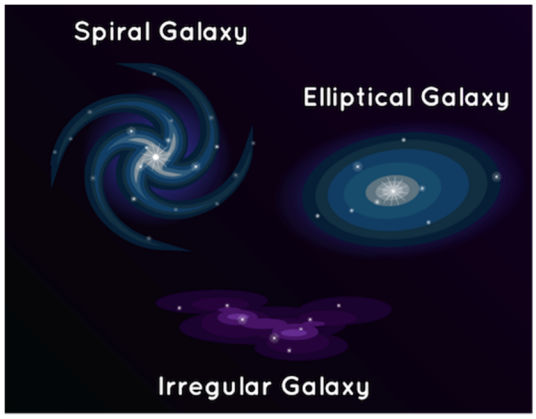
A galaxy is a huge collection of gas, dust, and billions of stars and their solar systems, all held together by gravity.

We live on a planet called Earth that is part of our solar system. But where is our solar system? It's a small part of the Milky Way Galaxy.

A galaxy is a huge collection of gas, dust, and of stars and their solar systems. A galaxy is held together by gravity. Our galaxy, the Milky Way, also has a super-massive black hole in the center.

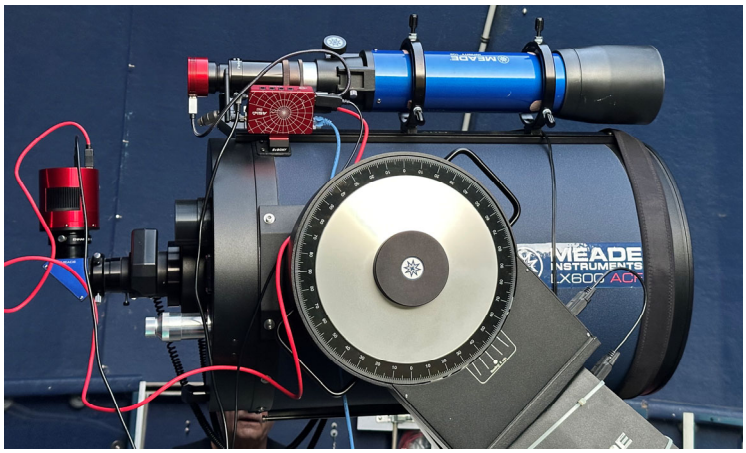
When you look up at stars in the night sky, you're seeing other stars in the Milky Way. If it's really dark, far away from lights from cities and houses, you can even see the dusty bands of the Milky Way stretch across the sky.

To learn more about our spiral Milky Way Galaxy and others, Explore Galaxies. (Hotlink: CTL-CLICK)



New EAA Setup for the HCPO

By Barry Schoenfelner



In the past few weeks we've implemented a new Electronically Assisted Astronomy (EAA) setup at the Hemlock Crossing Public Observatory (HCPO). The setup consists of a used ($35 on Facebook Marketplace) Meade Infinity 102mm achromatic refractor mounted atop the existing Meade 16" LX600 Schmidt-Cassegrain Telescope (SCT), the existing ZWO ASIAir camera & mount controller, and a ZWO ASI585MM monochrome camera ($499). The image is currently fed to a 32" TV mounted outside the dome via a wi-fi connected iPad.

Frank Roldan, our observatory director, acquired a mounting bar, necessary fasteners and used donated rings to attach and align the 102/600mm scope to the LX600.

A monochrome (black & white) camera was chosen for two reasons: First, a monochrome camera develops an image about 4-5 times faster than a one-shot color camera since there are no blue, green or red filters in front of each pixel to filter out the other wavelengths of light. Secondly, the monochrome image mimics the view users will see in the eyepiece since our eyes can't see color when viewing very dim objects like galaxies or nebulae.

EAA is more of an active observing technique than actual astrophotography. There is no need for guiding the scope since sub-exposures are usually 10 seconds or less and the software in the ASIAir will align and stack several individual sub-exposures, increasing the signal-to-noise level as the observation proceeds. Visitors have been excited to see the image of a galaxy or nebula develop and become more detailed over 5-15 minutes of stacking. In the very first exposures the central bulges of galaxies appear, but then spiral structure begins to develop before their eyes. Several excited visitors have taken pictures of the TV screen with their phones, and we have been able to AirDrop some of the images to those with iPhones. We plan on developing techniques to allow visitors to easily take away "souvenir" images of what they have observed, with all types of smart phones.

M101 — Pinwheel Galaxy with Satellite Tracks

Images of the moon are essentially instantaneous, because it's so bright, and we can expand and pan around the image to point out various types and ages of craters and other lunar features. Globular and open clusters show more detail and greater extent than can be easily seen at the eyepiece by a novice observer, all within 2-3 minutes of stacking sub-exposures. The "faint fuzzies" quickly grow into nicely detailed views.

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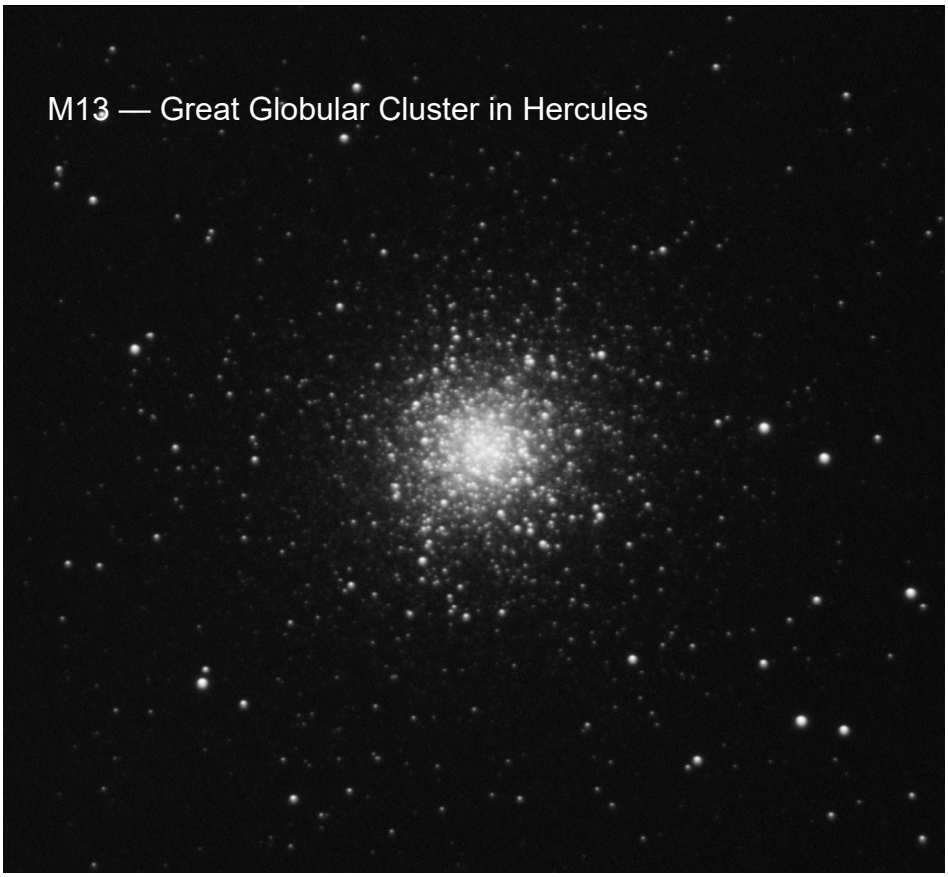
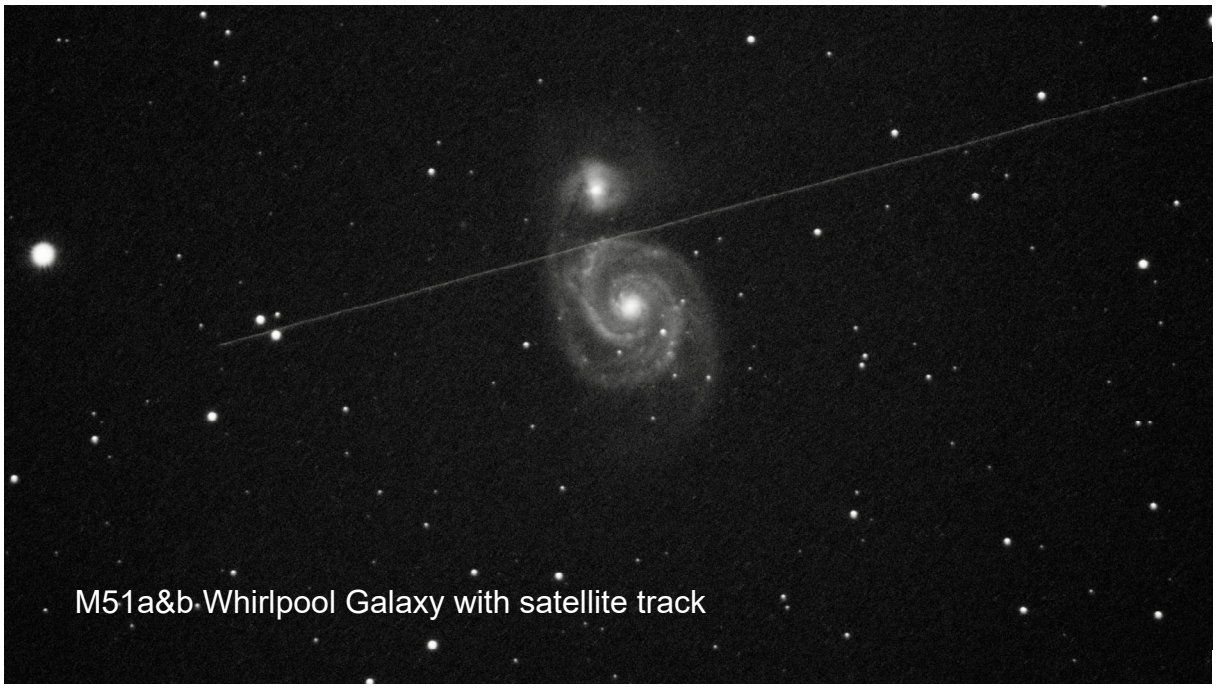


M13 — Great Globular Cluster in Hercules

Monochrome EAA will never equal the beautiful view of a contrasting-color double star (like Albireo) through the eyepiece of the 16” SCT, nor can it depict the deep orange-red to stop-sign red of carbon stars. The eyepiece view is still the best for those colored stars. But EAA can give visual users a hint of what to look for when they do try to see the spiral arms of a galaxy or subtle details of a nebula through the eyepiece, and that is what we hoped for when we decided to try out the technique at the HCPO.

Display of the EAA image outside the dome also allows many people to view the target object at the same time. Several children and adults sit on the sidewalk or cluster around the screen outside the dome watching the images devel
op. The “live” and changing nature of the image growing in seems to really engage visitors. This also gives them much more time to examine and appreciate the object compared to the few seconds each may get at the eyepiece. Additionally, one of our club members can point out details and give background info on the target as the image develops.

One of the bittersweet features of the EAA setup is that visitors can more easily see the negative effects of satellite tracks and the threat to astronomical research that they present. A satellite may occasionally streak through the field of view, but it’s uncommon during their usual short viewing time at the eyepiece. Many of our EAA images are disfigured by satellite tracks since stacking can go on for a prolonged time period.



M51a&b Whirlpool Galaxy with satellite track

Page 7 article continues next page

EAA also has the significant advantage of being able to punch through light pollution, smoke from wildfires, and moderately thin clouds that would prevent eyepiece views of galaxies and nebulae. Many observers use the technique with smart telescopes, and DIY rigs like ours, to observe targets from major cities with ultra-severe light pollution, like Tokyo, London, or Paris. Unfortunately, light pollution has been getting steadily worse at our observatory and there is very little hope for it stop increasing. This technique can allow us to continue viewing the otherwise faint fuzzies for years to come.

Another of the advantages of the EAA setup is the ability to provide telescopic views to those with mobility issues. People who cannot stoop to get through the dome doorway, or climb the observing ladder, can easily view the screen outside the dome. We also plan on testing our ability to display live EAA images on the large presentation TV in the Nature Center following the monthly Saturday public lectures. This would also be very useful during cold winter evenings. We have tried eyepiece observing sessions for people from senior living facilities and retiree groups, like HASP, but some are unable to fully partake of the experience. Mobility and cold weather tolerance issues would be mitigated by indoor viewing.

Please come by the HCPO on a public observing night and see for yourself what the new Electronically Assisted Astronomy setup can provide. We look forward to hearing from you, and welcome your suggestions for improvement.

Member Watch and Astrophotography Info

JUPITER - OCTOBER 2025
MOON
SHADOW TRANSITS
TIME = EDT, 24-HOUR FORMAT

DAY	MOON/S SHADOW		
	IO & EUROPA	IO & GANIMEDE	EUROPA & CALISTO
4	0249-0417		
11	0442-0653		
13		2311-0129	
18	0642-0849		
20		0224-0318	
25	2118-2242		
29	2035-2139		

UTC	0	1	2	3	4	5	6	7	8	9	10	11	12	13
EDT	20	21	22	23	0	1	2	3	4	5	6	7	8	9

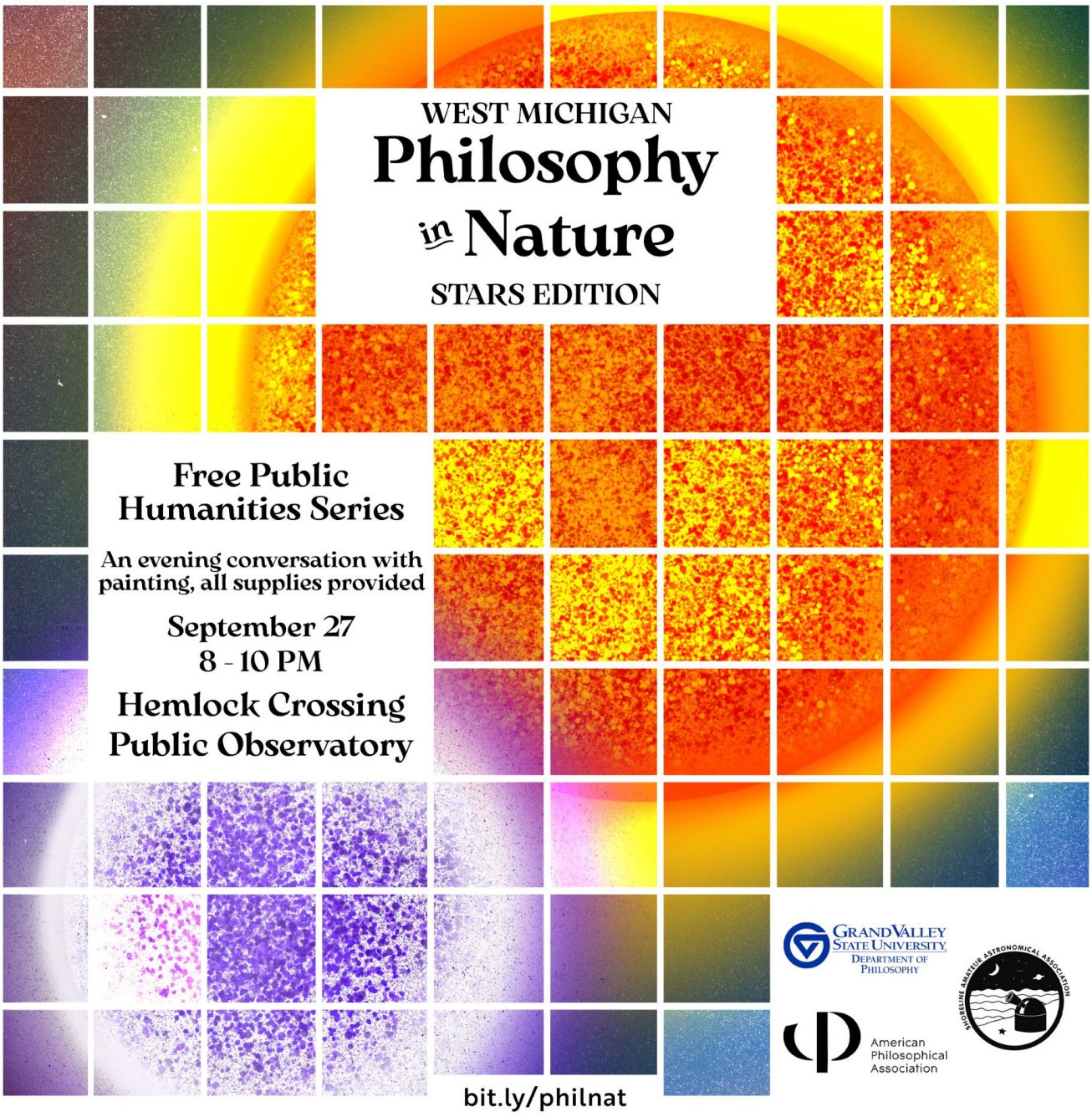
To Right: Public viewing night in August 2025.

VP Barry Schoenfelner introducing the universe to onlookers.

iOptron Rebate Program Opportunity

iOptron has an opportunity for club members. Club members: It's a rebate sent to the club organizer.

Buy five (5) iOptron mounts as a club and get 10% off, buy 10 and get 15% (any accessories purchased during the rebate period get the 10% or 15% as well). The rebate window is 30 days, it starts on the date of the first mount purchased. Once the mounts are purchased send a filled out form as well as proof of purchase for each mount. After a 30-60 day period we will send a single rebate check for the cumulative rebate. Information on Mounts (hotlink: CTL-CLICK)



Christmas Gift(s) for Yourself or Someone Else

This is an informational announcement for AL Members, AL Societies and their members, and customers of the League Sales web store. Please consider passing this info along to your club members. The RASC 2026 Observer's Handbooks (USA version) and Calendars are available for PRE-ORDER on the League Sales web store at ORDER HOTLINK. League Sales sells these items each fall at a great price with our members in mind. Stock will arrive typically in late November and then usually ships to customers in December in time for the holidays/Christmas. We suggest ordering early to ensure availability.

Selling Equipment?

If you want to sell your telescope or other astronomy equipment, we will provide space on this page of our newsletter.

Any member interested in selling their astronomy equipment to other members can do this via the Newsletter. SAAA will not be otherwise involved or responsible for any bidding/selling transactions. The member should list the asking price, provide a picture and a phone number for direct contact. Please send to Barb/Editor barbwbrown@hotmail.com) seven (7) days before the end of any month in order to be included in the next month's issue.

Keyholder Schedule

Members, please see our membership roster for contact information in order to schedule for the Keyholder in order to schedule an Observatory private tour.

SEP 7-13	David Lesh
SEP 14-20	Karl Rijkse
SEP 21-27	Frank Roldan
SEP 28-OCT 4	Barry Schoenfelner
OCT 5-11	Michael Long

NASA's Photo of the Day!

https://apod.nasa.gov/apod/astropix.html features the NASA photo of the day.

Have you missed a copy, or lost one, or just want to browse old issues of Astronomical League's *Reflector*?
Astronomical League's quarterly *Reflector* magazine:
https://www.astroleague.org/reflector/ (CTL-CLICK)

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