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The Language of Binoculars
Wednesday, June 18, at 7:30 p.m.



Our gaze has always been drawn to the far reaches. What lies beyond the next hill? What are those points of light in the night sky? Is that a friend or foe approaching on the distant horizon? Innate human curiosity, coupled with crucial practical needs—whether for hunting and foraging, navigation across vast landscapes, defense against approaching threats, or simply understanding our place in the cosmos—has consistently driven us to seek ways to bridge the gap between our perception and distant reality. This fundamental yearning to bring the remote into view, to clarify the unseen, laid the groundwork for countless innovations, resulting in sophisticated instruments designed to extend our sight. Among the most accessible and profound tools born from this ambition are binoculars. These powerful yet portable instruments, essentially two refracting telescopes mounted side-by-side, allow for comfortable, three-dimensional viewing by directing identical images to both eyes.

The **Martz-Kohl Observatory** is hosting an interactive talk designed to show you how to select or master your binoculars. On **Wednesday, June 18, 2025, at 7:30 PM**, optical expert and former president of the observatory, **Gary Nelson, will present “The Language of Binoculars,”** which will provide a detailed guide to understanding, using, and optimizing binoculars. Gary will explain terms such as magnification, objective size, exit pupil, field of view, porro prism, and more.

Attendees are strongly encouraged to bring their own binoculars or spotting scopes to the lecture. Gary will provide practical demonstrations and personalized guidance on proper usage, helping participants achieve sharper, clearer views of their desired subjects. The session will also cover how to identify the appropriate binoculars for individual needs and value, ensuring attendees make informed choices for future purchases.

Gary’s deep connection to the cosmos began during his college astronomy courses, where he learned the intricate art of grinding telescope mirrors from the legendary Marshal Martz - the namesake of the **Martz-Kohl Observatory**. Gary went on to teach mirror grinding classes, manufacture telescopes for beginners, and dedicated over two decades to repairing telescopes and binoculars. He was also a successful Meade telescope dealer for more than eight years, supplying professional-grade telescopes to colleges and professional astronomers alike.

June - July 2025 Newsletter
The Study of Stars
Wednesday, July 16, at 7:30 p.m.



Stars come in all shapes and sizes: Big powerful blue stars, small yet feisty red stars, strange pulsating yellow stars, and more. How do we know so much about stars? How did we go from seeing tiny points of light in the sky to knowing about red giants and supernovae? In this talk, intended for a general audience, **Dr. Alexandra Yep** will help us learn all about stars and the tools astronomers use to understand them.

Alex Yep is a poet turned astronomer. After earning her BFA in creative writing from Emerson College in Boston, MA, she jumped into the sciences, earning her MS in physics from California State University, Northridge, in 2016 and her Ph.D. in astronomy from Georgia State University in 2021. Dr. Yep now works as a visiting professor at Agnes Scott College in Decatur, GA, where she teaches physics and astronomy, research young star clusters, and directs the Bradley Observatory.

President's Update

As we move into the summer season, I look forward to the warmer weather, especially at night! As Orion sets for the time being and Leo takes his place in the sky at night, I'm excited for the opportunities that also arise for the year 2025. I'd like to thank our facilities Committee and our "Sunday Crew" for their hard work in repainting the main classroom, the Welcome Center and the Control Room. They all look fantastic! On March 13th we held a special event for the Total Lunar Eclipse. Our Vice-President and Educational leader Tom Traub put on 2 great presentations about the eclipse and then the Observatory was open all night for guests and members to witness this beautiful, natural phenomenon. The first presentation was given to the Be the Change Mentoring program through the Jamestown Jackals Basketball Team. The second was given to a packed house of 30+ people. We then had about a dozen people stay up all night with us at the Observatory to witness the Lunar Eclipse totality, and 4 stay until the very end at 5:30 am! It was cold, but everyone enjoyed the live images from the Takahashi refractor that were being streamed live in the main classroom, and views through the 20-inch Kohl Telescope. These events I feel truly highlight the Association's passion for sharing the night sky with the members and public. We have 24 students registered for this year's Space STEM Camp which will be held in July and are in the process of confirming group visits for the summer months. There's plenty still to do and see at the Martz-Kohl Observatory and I am so glad you are a part of it! If you want to be more a part of it, I (we) welcome that too! Stay safe and healthy, and I hope to see you soon!

Corey Swanson, President

The totality during the Lunar Eclipse in March taken through the Martz 24" telescope.



The totality during the Lunar Eclipse in March taken through the Takahashi 5" telescope.

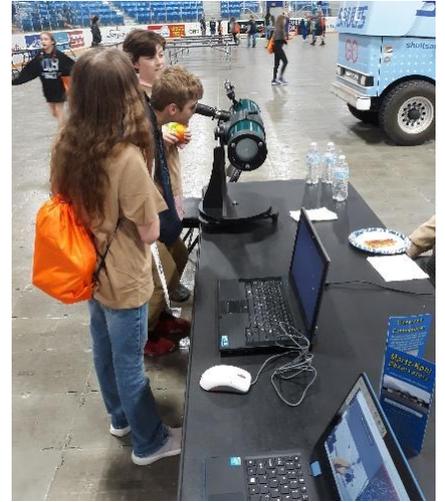


June - July 2025 Newsletter



Brian Ceci installing the new roof drain.

Members on the facilities committee installing the radio telescope.



STEM Wars at Northwest Arena.



Tom Traub doing a presentation at the Great Outdoors event at Allegheny State Park. Schools participating was Olean, Cassadaga, and Forestville, grades 4th and 5th.



STEM Wars at Northwest Arena.



Corey Swanson provided an insightful presentation on the ZWO Seestar series of smart telescopes on May 21st.

June - July 2025 Newsletter

Astronomy Type Events in June & July

- June 18** Moon passes Saturn in the morning sky.
- June 20** **Summer Solstice.** The June (summer) solstice marks the first day of Summer. It will be the longest day of the year in the Northern Hemisphere.
- June 22** Moon passes Venus in the morning sky.
- June 26** Moon and Mercury will be close in the evening sky.
- July 4** Mercury is farthest east of the sun in WNW sky after sunset.
- July 10** **Full Moon.** It's also known as the **Buck Moon.** The name is based on the observation that male deer, or "bucks," begin growing their antlers in late spring, and by July, these antlers are in full velvet, visible and in growth mode.
- July 16** Moon passes Saturn in the morning sky.
- July 21** Moon passes Venus in the morning sky.
- July 23** Moon passes Jupiter in the morning sky.
- July 30** **Two meteor showers peak.** The Southern Delta Aquariids with up to 25 per hour and the Alpha Capricornids with 5 per hour. Both are best seen in the southeast sky before morning twilight.

Calendar of Events

- July 9** **General Meeting at 7 p.m.** All are welcome to attend.
- July 16** On-site presentation with **Dr. Alexandra Yep**, Assistant Professor of Physics and Astronomy and Director of the Bradley Observatory, Agnes Scott College, **"How to Study the Stars,"** at **7:30 p.m.** It will be available online via Zoom.
- August 20** On-site presentation with **Ja:no's Janine Bowen**, **"The Moon's Importance to the Seneca Culture,"** at **7:30 p.m.** It will be available online via Zoom.
- September 24** The annual dinner and meeting at **6:00 p.m.** at the **Martz-Kohl Observatory.**
- October 4** **International Observe the Moon Night.** It's a worldwide public event that encourages observation, appreciation and understanding of our Moon and its connection to science, exploration, and human culture. Multiple telescopes will be set up for viewing the Moon.

Board Members: Corey Swanson, **President;** Tom Traub, **Vice-President;** Walt Pickut, **Secretary;** John Anderson, **Treasurer;** Josh Campbell, **Assistant Treasurer;** Lawen Griffin, Jr.; Laurie Livingston; Gary Nelson; Bill Widell; Phil Stafford; Marcy Kupiec; Phil Evans; and Brian Ceci.