August - September 2025 Newsletter

MARTZ·KOHL OBSERVATORY

Marshal Martz Memorial Astronomical Association Inc.

176 Robbin Hill Road, P.O. Box 14, Frewsburg, NY 14738 (716) 569-3689
www.martzobservatory.org

Grandmother Moon in Seneca Culture
Wednesday, August 20, at 7:30 p.m.

In Seneca culture, **Grandmother Moon** is a revered celestial being, a benevolent guardian who guides Earth's inhabitants through the seasons and influences natural rhythms. Her consistent presence in the night sky serves as a powerful symbol of the interconnectedness of all living things and the enduring wisdom of generations' past. Learn more about the myths and realities of **Grandmother Moon**.

Ja:no's (Janine) Bowen, a member of the Beaver Clan of the Seneca Nation and an expert in Seneca language and culture revitalization, will present on the revered Seneca figure of benevolent **Grandmother Moon on August 20, 2025, at 7:30 p.m**. Bowen holds an Ed.M. from Harvard University and an M.P.P. from the Harvard Kennedy School of Government. In 2020, she embarked on a new journey in education by starting coursework for an Ed.D. in Educational Leadership. Her ultimate goal is to combine her expertise to support indigenous students in their journey to becoming successful individuals, equipped to overcome the unique challenges faced by Native peoples as they navigate the complexities of two worlds. This special, family-friendly presentation offers a unique opportunity to learn about the myths and realities surrounding Grandmother Moon.

Ja:no's Bowen observed a significant gap in understanding among her K-8 students while teaching Seneca language and culture. She noted, "Teaching Seneca language and culture to K-8 students, I quickly realized they had little understanding of the lunar cycle and the profound role the moon plays in our culture." This realization prompted her to make a dedicated effort to track the Seneca moons and deepen her own comprehension of the lunar cycle.

The Future of Space Flight
Wednesday, September 17, at 7:30 p.m.

Retired Physics Professor, **Mike Stafford,** is returning to the observatory for an exciting talk called **"The Future of Space Flight."** Mike will kick things off with a quick trip through the fascinating history of space flight. He'll then dive into the near future of space travel before letting imaginations soar into some wild speculation about exploring other planets and traveling to distant stars! True to Mike's style, he'll weave in some easy-to-understand physics lessons along the way – all done painlessly, with no complicated math involved.

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President's Update

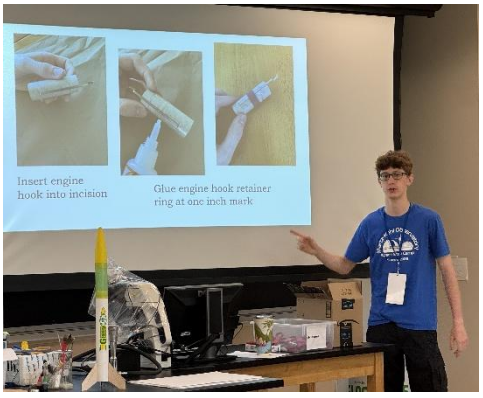
Summer is certainly flying right past us, and boy, have we enjoyed some nice weather! Things have been hot at the observatory over the last few months too, and I'm proud of and grateful for our dedicated group of volunteers who keep getting stuff done. The observatory has been kept in good and clean condition, inside and out, and several projects have been completed (or mostly completed) thanks to their efforts. Our Wednesday public nights continue to be well attended, and we have hosted several groups for tours and educational initiatives. Our Space STEM Camp in July was well attended and everyone had a great time. I'd like to extend a special thank you to our donors, volunteers, school educational staff and our guest speaker Dr. Alex Yep, who all gave to make this an enjoyable week-long camp for the kids. A major project recently completed is an upgrade to the Kohl Dome, utilizing modern technology (including a Raspberry Pi) to once again allow the dome to follow the telescope automatically. As most of you know, this capability was lost shortly after acquiring the dome from Dr. Kohl. But now, thanks to our volunteers' efforts, the dome is alive once again! The collaboration with the Chautauqua Amateur Radio Service continues to go well as they have now installed antennas and the amateur radio station is fully operational. There's a lot more to be done, and we want YOU to play an active role in helping us accomplish our goals! Thank you for your support, and we certainly look forward to seeing you soon at the Martz-Kohl Observatory!

Corey Swanson, President, MMMAA, Inc.

Summer Internship at Martz-Kohl Observatory

Nicholas Bettwy

This summer, I had the opportunity to intern at the Martz-Kohl Observatory, working primarily with Mr. Tom Traub and others who operate the facility. As an amateur astronomer and someone who is interested in pursuing astrophysical research, this internship served as a great educational experience and provided me with a unique opportunity to work hands-on with complex equipment. During my first week as an intern, I became familiar with the technology in the observatory, especially the broad array of telescopes available for use. I really enjoyed learning about the capabilities of each telescope and how to operate them both in-person and remotely. With Tom's guidance, I was able to create and run imaging sequences for the 24-inch telescope via software online, and I enjoyed having the opportunity to directly apply what I had learned during night observations. Helping with the Space STEM Camp during my second week was also a great experience. With the other volunteers, I helped to introduce the students to the facilities at the observatory. I also helped lead the students through their rocket assembly and launch protocol (we had 100% launch success!). During my third week, I worked with Tom to make Martz's exterior sky dome functional for observing. We reviewed the telescopes located in the observatory that were not actively in use and determined which telescope would best suit the dome outside. We worked through some testing and alignment issues, and it should soon be ready to use on future observing nights. I also learned how to observe, compile, and process night sky images. Below is my image of the Crescent Nebula (NGC 6888). Overall, my internship was a fantastic experience, and I feel fortunate to have worked alongside Tom and other individuals at MKO who are incredibly knowledgeable and experienced in this field.



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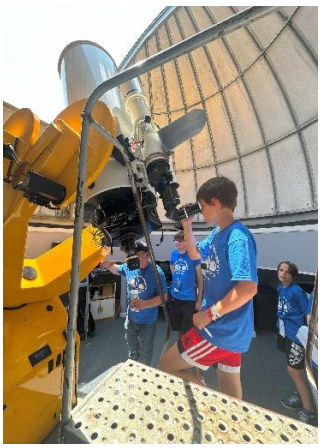
Space STEM Camp
July 14-18

From the moment the students arrived on Monday, they embarked on an amazing journey of discovery. Throughout the week, they delved into a universe of Space and STEM related activities stating with exploration of the hidden patterns in light, learning to identify elements by their spectra, and building their own Spectroscopes to see the invisible. They explored the physics behind light, lenses, and mirrors, even constructing their very own Galileoscopes. Our campers became cosmic researchers, learning to identify and student Deep Space Objects and navigate the night sky with Planispheres. Students explored fascinating topics like Physiology of astronauts, programmed rovers, and built their own LEGO rovers while being extremely cautious about contamination. Campers enjoyed daily trips to the Martz-Kohl Observatory, experience telescope viewings, tours, and even programming a telescope themselves to capture an image of their Deep Space Objects. The week culminated in a thrilling Rocket Launch where their rockets soared and their egg passengers - returned to Earth safely – a true text to their newfound engineering skills. We were privileged to have Dr. Alexandra Yep as our guest speaker, sharing her experience and inspiring our young explorers. This amazing week wouldn't have been possible without the incredible partnership between Martz-Kohl Observatory, Falconer Central School, and Jamestown Community College. Thank you to our sponsors and donors, particular Shults Auto Group, Wegmans, and several members of the Martz-Kohl Observatory for their sponsorship. Without their generous support, this experience would not be possible.









It's time to renew your membership for 2025-26. The membership year coincides with the fiscal year, October 1 through September 30th. You have the option of renewing your membership online at https://martzobservatory.org/about/membership-application-2022/ or you can choose to download a **printable (fillable PDF) version of the form** and mail with a check, payable **to MMMAA Inc., 176 Robbin Hill Road, P.O. Box 14, Frewsburg, NY 14738.** On behalf of the **Marshal Martz Memorial Astronomical Association, Inc.,** we'd like to express our deepest gratitude for your continued support. Your membership is very important for the survival of our organization.

The **Annual Meeting** for the **Marshal Martz Memorial Astronomical Association, Inc., is Wednesday, September 24th, at 6:00 p.m.** Dinner will be catered by 3 C's Catering. **Cost is $22/person.** The deadline for reservations is **September 12th**. You can mail your check, payable to MMMAA Inc., to 176 Robbin Hill Road, P.O. Box 14, Frewsburg, NY 14738.

Astronomy Type Events in August & September

August 12-13 The **Perseid meteor shower** peaks on the evening of August 12. The maximum of the shower falls three days after the full Mon, so viewing conditions won't be optimal. However, the long duration of this shower means you still have darker opportunities to see some Perseid meteors, like around the new moon on August 24th.

September **Saturn will be at its brightest in September 2025**, specifically around the 21st. This is when Saturn reaches opposition, meaning it will be on the opposite side of the sky from the Sun, with Earth in between, making it appear at its biggest and brightest. Saturn's rings return to about a 2-degree angle, for better viewing, after being edge-on, earlier in the year.

September 7 **Full Moon.** It's also known as the **Corn/Harvest Moon**. This time of year – late summer into early fall – corresponds with the time of harvesting corn, hence the **Harvest Moon.** The **Harvest Moon** is the full moon that occurs to the September equinox each year. The Moon will be near its closet approach to Earth and will look slightly larger and brighter than usual.

September 22 **Autumnal Equinox.** This marks the beginning of fall in the Northern Hemisphere. The sun will be (almost) directly above the Earth's equator, resulting in roughly equal day and night lengths

Calendar of Events

August 20 On-site presenation 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 17 On-site presentation with **Mike Stafford, "The Future of Space Flight," at 7:30 p.m**. It will be available online via Zoom.

September 24 The annual meeting at the **Martz-Kohl Observatory at 6:00 p.m. Cost is $22/person.**

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.