



## August, 2024

**Website:** [www.midhudsonastro.org](http://www.midhudsonastro.org)

**President :** Jack Chastain  
**Secretary:** Jim Rockrohr  
**Newsletter Editor:** Rick Versace  
**Publicity:** Tim Denman  
**Speakers:** Alexandra Passas(?)

**Directors:** Alex Passas, Karl Loatman, Steve Dittmar, and Willie Yee

**groups.io Group:** [mhaa.groups.io](https://mhaa.groups.io)

**Vice President:** Dave Sherman  
**Treasurer:** Eric Myers  
**Membership Coordinator:** Eric Myers  
**Webmaster:** Steve Dittmar  
**Outreach:** Joe Macagne(?)  
**College Liaison:** Dr. Amy Bartholomew

**The next meeting is August 20<sup>th</sup>, 2024, on Zoom and in person. Check MeetUp for details and link. Zoom link will be sent to all those that RSVP.**

### August Speaker

**“Shooting the Moon: A History of Photographing our Cosmic Neighbor”**

Just one year after the first photograph of a human was taken, the first image through a telescope was captured. The subject of that first astrophotograph was the Moon. Now, robotic spacecraft carrying state-of-the-art cameras send back images of newly explored worlds from millions of miles away, but our fascination with our nearest neighbor in the vastness of space has only grown. We still strive to capture its serene beauty, and even in the pure pursuit of science we cannot help but create art.

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Online link to the MHAA monthly Business Meeting Agenda:

<http://mhaa.midhudsonastro.org/agenda>

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"Astronomy at Lake Taghkanic State Park"

<http://spy-hill.net/myers/astro/ltsp/>

Thanks Eric Myers

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## Minutes of the monthly meeting of the Mid Hudson Astronomical Association, July 16, 2024

The meeting was called to order at 7:30 PM by President Jack Chastain in the Coykendall Auditorium at SUNY New Paltz, NY, and on the online application Zoom.

The minutes of the June meeting as published in the newsletter were unanimously approved.

### **Officer's Reports:**

**President:** Jack Chastain was present.

- o Nothing to report.

**Vice President:** Dave Sherman was present.

- Nothing to report.

**Recording Secretary:** Jim Rockrohr was present.

- Nothing to report.

**Publicity:** Tim Denman was present.

- Nothing to report.

**Newsletter:** Rick Versace was not present.

- (No report).

**Treasurer:** Eric Myers was present.

- See latest newsletter for numbers.
- A suggestion was made at the last meeting to purchase a SeeStar telescope for outreach events.
  - o Cost is about \$500.
  - o Live stacking of images.
  - o Fully automated
  - o View on Zoom and iPhone
- After discussion a motion was made by Eric to allocate \$600.00 to purchase a SeeStar telescope, tripod, and carrying case.
  - o The motion was seconded and passed unanimously.
  - o Eric to pursue the purchase.

**Outreach:** Mike Goldstein was not present.

- No report

**Speakers:** Bart Henin was present.

- August will be Zoe Pantaro from Cornell University: "Shooting the Moon: A History of Photographing our Cosmic Neighbor".

**Membership:** Eric Myers (acting) was present

- Needs some help.
- Making progress migrating to new web system.
  - o About ¾ complete.
  - o Please login and set up your account.
  - o Once logged in you have access to a lot of members' only stuff.

**Solar System Ambassador:** Willie Yee was present.

- 9/14 is International Observe the Moon Night (IOMN).
  - o Need someone to organize an event since Willie will be out of town.
- Eric mentioned that 9/7 will be a dedication of SUNY's "Moon Tree" on campus.

**Webmaster:** Steve Dittmar was present

- Working on membership stuff.

#### Old Business:

- **Last club star party** was good.
  - o Lots of people, good questions
  - o Some stayed until 4 AM
- **Bachelorette Star party** was a good night.
  - o Good questions.
  - o \$200.00 donation to club.

#### New Business:

- o Received donation of a LX200-12 telescope, mount and tripod.
  - o Steve has it for now.
- o Jack is looking for a sighting scope for a small telescope.
  - o Red dot finder? No, too low.
  - o Laser? No, too dangerous for public use.
  - o Right angle optical scope? Willie has one.
- o **Club Picnic:** August 17, 6-11 PM, at Field of Dreams park in New Paltz
  - o \$15.00 per person
  - o RSVP by August 9 to Alex.
  - o Contact Scott or Alex if you want to bring something.

#### Events:

- **Walkway Over the Hudson** - 7/19. See Eric.
- **Next club star party** - 8/2. Remember to RSVP.
- **Riverbend Park, Gardiner** - 8/3. See Jack.
- **Canopus Lake** - 8/9. See Rick.
- **Sam's Point** - date TBD.
- **Kingston Sailing Club** - date TBD. Evening event on the river. See Jack.

#### Reminders:

- Paid members get access to club equipment (telescopes, imagers, trackers) and club DVD/VHS video library.
  1. See the website or Jack for a list of available items.
- Paid members can also get access to the club Slack channels. Contact Jack or Eric for access.

## Observing Reports:

- (none mentioned)

The business meeting was adjourned at 8:03 PM. There were 13 Zoom windows open at the end of the business meeting and approximately 19 people were in the auditorium. **The next meeting is August 20<sup>th</sup>, 2024, on Zoom and in person. Check MeetUp for details and link. Zoom link will be sent to all those that RSVP.**

The presentation that followed was by Thomas Evangelist, Assistant Principal at Brooklyn Technical High School titled “Chemical Analysis on the Europa Clipper”.

Submitted by James Rockrohr, August 17, 2024.

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## **MHAA Treasurer’s Report for August 2024**

As of 18 August 2024 we have \$4,400.22 in our bank account and \$2341.69 in our PayPal account, with the Treasurer holding \$312.00 in petty cash. Our monthly payment for Google gSuite went down further to \$31.14 this month, and we paid \$15.99 on the 15th for Zoom Pro for one month. This month we took in \$175.26 in dues for 7 renewing members, with no new members added. Thanks to founding member David Lindeman for a \$40 donation to the club in addition to his membership dues.

As I mentioned last month, I had been informed by Meetup that the price for their services will be going up. The cost was even higher than expected, at \$193.31 for 6 months of service. For comparison, in the past several years the cost for Meetup every 6 months was \$106.86.

At last month’s meeting the members voted to authorized the Treasurer to spend up to \$600 to purchase a SeeStar S50 smart telescope and supporting equipment. The telescope was purchased for \$449, and a moon filter, filter holder, and lens cap have been ordered for \$81.04. The device comes with a small tripod, so it sits low to the ground, so we may want to buy a taller tripod to get it up to the “customary” height.

We held our annual picnic on Saturday, August 17th, at Field of Dreams park near the Ulster County Fairgrounds, with 18 people in attendance. The price to attend was \$15 per person, which brought in \$270, while the cost of food and drink was \$273, so we basically broke even on the food. The club also paid \$125 to the Town of New Paltz to rent the pavilion. (They also asked for a \$50 deposit check, but they will tear that up on Monday.)

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Respectfully Submitted,  
Eric Myers  
Treasurer

## **MHAA Membership Report for August 2024**

As of 18 August 2024 the club has 100 members in good standing, of which 6 are students. This month 7 memberships were renewed, with no new members added. There are 6 lapsed memberships, one of them over a year old. Many of the students graduated this year and so will be dropped from the roster later this month.

We have 98 members on Slack, of which only 27 have been active this past month, and there are 24 unused invitations to join. There are 110 people signed up for our [groups.io](https://groups.io) mailing list, excluding those with unverified addresses or bouncing email addresses. As a reminder, that list includes non-members who want to receive information about club activities. On social media, we have over 2,675 followers on Meetup.com, 1,096 followers on Facebook (counting only those in the US) and 184 followers on Instagram.

Now that I have learned how to use our new website I have been adding people to it whenever they renew their membership, and working my way through the roster to add those who renewed earlier in the year. Right now there are about 11 people remaining to be transferred.

Our new website includes a blog for club news, and I am now adding membership reports to that in addition to our Newsletter.

Respectfully Submitted,  
Eric Myers  
Acting Membership Coordinator

## **Tech Team Report**

The "tech team" (primarily consisting of Jack, Eric, Michael, and Steve) continue to meet once or twice a month with the goal expanding and refining the MHAA website.

### **Membership Mangement via the website**

The majority of our members (~88) have been entered into the website membership management system and website accounts were created for them. The remaining few will be added as their renewal date nears. Planning was done by all 4 of us, but the data import and account creation was largely the responsibility of Jack and Eric.  
*If you havent been added yet and would like to be before your renewal date, please contact Eric.*

Members with a website account are able to login to pay their renewal dues online and access members only features. At the moment, the primary members only feature is the form for using our club's Taghkanic State Park permit for personal stargazing visits to the park, but more will be added over time like a lending library for reserving club gear you want to borrow.

### **Website content**

We're working on improving our static page content and experimenting with more dynamic/frequent content like blog posts for

- event recaps
- newsletters
- Treasurers reports
- Etc

We will likely tie the blog entries into our existing site menu in the next few weeks.

## Website 2.0

My initial intent for phase 1 of the website was merely to host static content that made it easier to find and contact us, lead people to our events on Meetup, attract new supporting members, make member benefits more obvious, etc. Based on the amount of contact initiated through the website and from talking with people at the outreach events, that was fairly successful.

Now that our membership can be managed by the site, we can expand its capabilities with member-only accessible content. This can simplify things like the yearly vote for the club positions, pre-filling almost all fields of the Lake Taghkanic permit form, etc.

We are planning some changes to the theme/style and menus to utilize the new use cases and content and will also try to highlight our members' astrophotography and event images throughout.

Planning for the future, I am also looking to develop it in a way that will be easier to accommodate style refreshes and even migrations to a new host, should a transfer of ownership ever be needed.

There's no specific timeline on this, but Steve and Michael are in the initial design discussion phase.

## Area dark site guides

Michael has been taking the lead on visiting and researching nearby darker-sky publicly accessible locations like state parks to assemble 1-page quick guides for astronomers. They include information about accessing the locations (rules of the park, permit requirements, etc) as well as images depicting the horizon etc. These guides will be hosted on our website to help answer the common question of "where can I go to..." while also helping the public see the MHAA as a go-to resource for local astronomy knowledge.

- Steve Dittmar  
MHAA Webmaster

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## Night Sky Notes: Marvelous Moons By Kat Troche



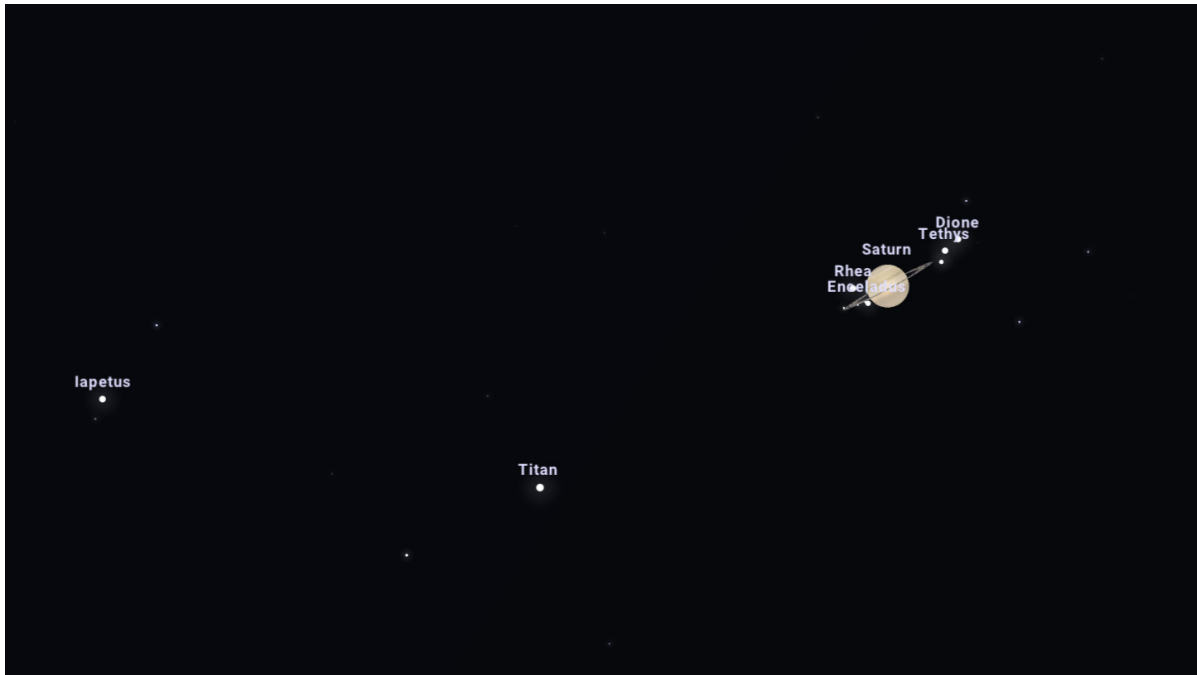
**This article is distributed by NASA's Night Sky Network (NSN).**

The NSN program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit [nightsky.jpl.nasa.gov](https://nightsky.jpl.nasa.gov) to find local clubs, events, and more!

September brings the gas giants Jupiter and Saturn back into view, along with their satellites. And while we organize celebrations to observe our own Moon this month, be sure to grab a telescope or binoculars to see other moons within our Solar System! We recommend observing these moons (and planets!) when they are at their highest in the night sky, to get the best possible unobstructed views.

## The More the Merrier

As of September 2024, the ringed planet Saturn has 146 identified moons in its orbit. These celestial bodies range in size; the smallest being a few hundred feet across, to Titan, the second largest moon in our solar system.



The Saturnian system along with various moons around the planet Saturn: Iapetus, Titan, Enceladus, Rhea, Tethys, and Dione. Credit: Stellarium Web

Even at nearly 900 million miles away, [Titan](#) can be easily spotted next to Saturn with a 4-inch telescope, under urban and suburban skies, due to its sheer size. With an atmosphere of mostly nitrogen with traces of hydrogen and methane, Titan was briefly explored in 2005 with the [Huygens probe](#) as part of the [Cassini-Huygens mission](#), providing more information about the surface of Titan. NASA's mission [Dragonfly](#) is set to explore the surface of Titan in the 2030s.

This mosaic of Saturn's moon Enceladus was created with images captured by NASA's Cassini spacecraft on Oct. 9, 2008, after the spacecraft came within about 16 miles (25 kilometers) of the surface of Enceladus. Credit: NASA/JPL/Space Science Institute

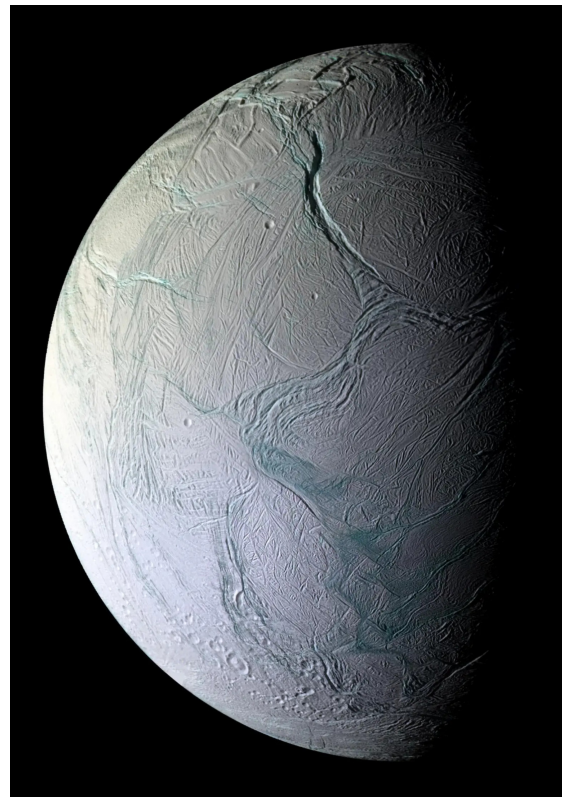
Saturn's moon [Enceladus](#) was also explored by the Cassini mission, revealing plumes of ice that erupt from below the surface, adding to the brilliance of Saturn's rings. Much like our own Moon, Enceladus remains tidally locked with Saturn, presenting the same side towards its host planet at all times.

## The Galilean Gang

The King of the Planets might not have the most moons, but four of Jupiter's 95 moons are definitely the easiest to see with a small pair of binoculars or a small telescope because they form a clear line. The Galilean Moons – Ganymede, Callisto, Io, and Europa – were first discovered in 1610 and they continue to amaze stargazers across the globe.

The Jovian system: Europa, Io, Ganymede, and Callisto. Credit: Stellarium Web

- [Ganymede](#): largest moon in our solar system, and larger than the planet Mercury, Ganymede has its own magnetic field and a possible saltwater ocean beneath the surface.
- [Callisto](#): this heavily cratered moon is the third largest in our solar system. Although Callisto is the furthest away of the Galilean moons, it only takes 17 days to complete an orbit around Jupiter.
- [Io](#): the closest moon and third largest in this system, Io is an extremely active world, due to the push and pull of Jupiter's



gravity. The volcanic activity of this rocky world is so intense that it can be seen from some of the largest telescopes here on Earth.

- [Europa](#): Jupiter’s smallest moon also happens to be the strongest candidate for a liquid ocean beneath the surface. NASA’s [Europa Clipper](#) is set to launch October 2024 and will determine if this moon has conditions suitable to support life. Want to learn more? Rewatch the July 2023 Night Sky Network webinar about Europa Clipper [here](#).

Be sure to celebrate [International Observe the Moon Night](#) here on Earth September 14, 2024, leading up to the super full moon on September 17<sup>th</sup>! You can learn more about supermoons in our mid-month article on the [Night Sky Network](#) page!

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## Star Party Schedule

Date	Arrival Time	Civil Dusk
Jul 5 2024	8:30 PM	21:07 EDT
Aug 2 2024	8:00 PM	20:43 EDT
Aug 30 2024	7:30 PM	20:00 EDT
Sep 27 2024	6:30 PM	19:10 EDT
Nov 1 2024	5:30 PM	18:17 EDT
Nov 29 2024	4:30 PM	16:55 EST
Dec 27 2024	4:30 PM	17:01 EST
Jan 24 2025	5:00 PM	17:29 EST
Feb 28 2025	5:30 PM	18:11 EST

## Directions To The Star Party Site

[Lake Taghkanic State Park](#) is in the town Ancram, NY. The park entrance is on the Taconic Parkway 10 minutes north of the exit used for Wilcox park.

Star Parties at Lake Taghkanic are held in the West Parking lot, next to the beach. The skies are darker than in Wilcox, with less stray light to deal with. The horizon is also much lower, especially to the south and east, making many more targets possible.

**IMPORTANT:** all events at Lake Taghkanic State Park require an **RSVP** which includes license plate number of the car you are bringing (please do so via [Meetup](#)). The park is patrolled by state police, and all non registered cars will be ticketed and risk our use of the park.

## General Information:

- ♦ Dates listed for star parties are the primary dates. The rain date is the following night unless otherwise noted. Only one session is held for a given weekend, usually on the primary date, Friday, unless postponed (usually due to inclement weather) to the backup date, Saturday. Exceptions to this are noted in the “Scheduled Events” section above.
- ♦ All outdoor events are FREE! All are welcome. If you bring small children, it is **your** responsibility to keep a close eye on them. Please do not bring white-light flashlights. Instead, bring a red astronomer’s flashlight or an ordinary flashlight covered with several layers of red cellophane. If in doubt about the weather, check the status of the event at [www.midhudsonastro.org](http://www.midhudsonastro.org).