



November, 2024

Website: www.midhudsonastro.org

President : Jack Chastain
Secretary: Jim Rockrohr
Newsletter Editor: Rick Versace
Publicity: Tim Denman
Speakers: Bart Henin

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

groups.io Group: mhaa.groups.io

Vice President: Dave Sherman
Treasurer: Eric Myers
Membership Coordinator: Eric Myers
Webmaster: Steve Dittmar
Outreach: Michael Goldstein
College Liaison: Dr. Amy Bartholomew

The next meeting is November 19th, 2024, on Zoom and in person. Check MeetUp for details and link. Zoom link will be sent to all those that RSVP.

November Speaker

“What Have Space Telescopes Told Us About the Universe”

Dr. Willie Yee

The presentation will discuss the findings of the Hubble and Webb space telescopes, and what they have taught us about the history of the universe, and how they are changing our theories about its evolution.

Online link to the MHAA monthly Business Meeting Agenda:

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



"Astronomy at Lake Taghkanic State Park"

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



Minutes of the monthly meeting of the Mid Hudson Astronomical Association, October 15, 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 September meeting as published in the newsletter were unanimously approved.

Officer's Reports:

President: Jack Chastain was present.

- Elections coming in December.
 - We need a nominating committee. See Jack if interested.
- No technical meeting this month.

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 newsletter for latest numbers.
- No other news to report.

Outreach: Mike Goldstein was present.

- Star party at **Auto Camp** near Saugerties, 11/20. See Mike. Expecting 20-40 people.
- Confirmed with **Olana** for a star party on 11/22 (11/23 rain date) and a winter solstice event on 12/21 from 1-4 PM. Expect 30-40 people. Need at least 3 solar scopes.
- Working with **Catskill Visitor Center** in Mount Tremper for a sun/star party in October.
- Star party 12/3 at Durham Elementary School, Cairo, NY. See Mike.

Speakers: Bart Henin was present.

- October will be Steve Dittmar on the Astrospheric App.
- November will be Willie Yee on White Dwarfs.
- December is club presentations and munchies. (Willie, Eric, and Jack, presenting so far) See Bart or Jack if you want to present.

- Speakers booked through January.

Membership: Eric Myers (acting) was present

- Needs some help.
- A new student member, Sara Lawrence.
- A couple of renewals this month.
- Currently 105 paid members.

Solar System Ambassador: Willie Yee was present.

- Europa Clipper has launched. Will be at Jupiter in 2030.
- Look for the Comet!
- Willie speaking at the Science Café in December: Beijing Ancient Astronomical Observations.

Webmaster: Steve Dittmar was present

- Normal maintenance; nothing to report.

Old Business:

- **Last club star party** was cancelled (again!) due to weather.
- **Observe the comet!**

New Business:

- Suggest using additional alternate dates for club star parties.
 - Use the following Friday or Saturday if prime dates cancelled. Moon rises late.
 - Discussion on how to schedule with respect to new moon.
- Where's the expected Nova? (Discussion followed.)
- We have been offered a chance to buy or have donated to us some telescope stuff. See Jack for details.
- **Club elections** at December meeting.
 - Need a nominating committee, but most current officers are willing to continue.

Events:

- **Next club star party** – 11/1. Lake Taghkanic. **Remember to RSVP.**
- **Walkway Over the Hudson** – 10/18. See Eric.
- **Auto Camp** – 10/20. See Mike.
- **Club Star Party** – 11/1. Lake Taghkanic, **be sure to RSVP.**
- **Kent Star Party** – 11/2. See Jack.
- **Olana** - 11/22 (11/23 rain date). See Mike Goldstein.
- **Club Star Party** – 11/29. Lake Taghkanic, **be sure to RSVP.**
- **Durham Elementary School** – 12/3. Cairo, NY. See Mike.
- **Saugerties High School** – 12/6, see Jack
- **Olana Sun party** – 12/21 (Sunday, 1-4 PM), see Mike Goldstein.
- **Sam's Point** – date TBD.

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 14 Zoom windows open at the end of the business meeting and approximately 9 people were in the auditorium. **The next meeting is November 19th, 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 Steve Dittmar: “Astronomy-centric Weather Forecasting with Astropheric App”.

Submitted by James Rockrohr, November 15, 2024.

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## MHAA Treasurer's Report for November 2024

As of 17 November 2024 we have \$4,726.39 in our bank account and \$2692.89 in our PayPal account, with the Treasurer holding \$37.00 in petty cash.

This month we took in \$98.67 in dues for 3 renewing members. Our monthly payment for Google gSuite was again \$31.14 this month, and we paid \$15.99 on the 15th for Zoom Pro for one month.

Respectfully Submitted,  
Eric Myers  
Treasurer

## MHAA Membership Report for November 2024

As of 17 November 2024 the club has 106 members in good standing, of which 4 are students. This month we gained 1 new student membership, and there were 3 membership renewals.

Respectfully Submitted,  
Eric Myers  
Acting Membership Coordinator

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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 to find local clubs, events, and more!

November's Night Sky Notes: Snowballs from Space by Kat Troche

If you spotted comet C/2023 A3 (Tsuchinshan-ATLAS) in person, or seen photos online this October, you might have been inspired to learn more about these visitors from the outer Solar System. Get ready for the next comet and find out how comets are connected to some of our favorite annual astronomy events.

Comet Composition

A comet is defined as an icy body that is small in size and can develop a 'tail' of gas as it approaches the Sun from the outer Solar System. The key traits of a comet are its **nucleus**, **coma**, and **tail**.

The **nucleus** of the comet is comprised of ice, gas, dust, and rock. This central structure can be up to 80 miles wide in some instances, as [recorded by the Hubble Space Telescope in 2022](#) – large for a comet but too small to see with a telescope. As the comet reaches the inner Solar System, the ice from the nucleus starts to vaporize, converting into gas. The gas cloud that forms around the comet as it approaches the Sun is called the **coma**. This helps give the comet its glow. But beware: much like Icarus, sometimes these bodies don't survive their journey around the Sun and can fall apart the closer it gets.

The most prominent feature is the **tail** of the comet. Under moderately dark skies, the brightest comets show a dust tail, pointed away from the Sun. When photographing comets, you can sometimes resolve the *second* tail, made of ionized gases that have been electronically charged by solar radiation. These ion tails can appear bluish, in comparison to the white color of the dust tail. The ion tail is also always pointed away from the Sun. In 2007, NASA's STEREO mission [captured images of C/2006 P1 McNaught and its dust tail](#), stretching over 100 million miles. Studies of those images revealed that solar wind influenced both the ion and dust tail, creating striations – bands – giving both tails a feather appearance in the night sky.



Comet McNaught over the Pacific Ocean. Image taken from Paranal Observatory in January 2007. Credits: ESO/Sebastian Deiries

Coming and Going

Comets appear from beyond Uranus, in the Kuiper Belt, and may even come from as far as the Oort Cloud. These visitors can be **short-period** comets like Halley's Comet, returning every 76 years. This may seem long to us, but **long-period** comets like Comet Hale-Bopp, observed from 1996-1997 won't return to the inner Solar System until the year 4385. Other types include **non-periodic** comets like NEOWISE, which only pass through our Solar System once.

But our experiences of these comets are not limited to the occasional fluffy snowball. As comets orbit the Sun, they can leave a trail of rocky debris in its orbital path. When Earth finds itself passing through one of these debris fields, we experience meteor showers! The most well-known of these is the Perseid meteor shower, caused by Comet 109P/Swift-Tuttle. While this meteor shower happens every August in the northern hemisphere, we won't see Comet Swift-Tuttle again until the year 2126.

A view of the 2023 Perseid meteor shower from the southernmost part of Sequoia National Forest, near Piute Peak. Debris from comet Swift-Tuttle creates the Perseids. Credit: NASA/Preston Dyches



See how many comets (and asteroids!) have been discovered on [NASA's Comets page](#), learn how you can [cook up a comet](#), and check out our mid-month article where we'll provide tips on how to take astrophotos with your smartphone!

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## Star Party Schedule

| Date        | Arrival Time | Civil Dusk |
|-------------|--------------|------------|
| 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  |
| Mar 28 2025 | 7:00 PM      | 19:44 EDT  |
| Apr 25 2025 | 7:30 PM      | 20:17 EDT  |
| May 23 2025 | 8:00 PM      | 20:49 EDT  |
| Jun 20 2025 | 8:30 PM      | 21:08 EDT  |
| Jul 25 2025 | 8:30 PM      | 20:53 EDT  |

### 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).