



# Mid-Hudson Astronomical Association

## October, 2021

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:** Joe Macagne, Steve Carey, Willie Yee, Karl Loatman

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

**Vice President:** Tim Denman

**Treasurer:** Eric Myers

**Membership Coordinator:** Rick Versace

**Webmaster:** Steve Dittmar

**Outreach:** Joe Macagne

**College Liaison:** Dr. Amy Bartholomew

The next meeting is October 19<sup>th</sup>, 2021, on Zoom. Check MeetUp for details and link. Link will be sent to all those that RSVP.

MHAA members and other [groups.io](https://groups.io) contacts may attend the meeting in person at the former meeting site in the auditorium of the Coykendale Science building a cross from the planetarium. Proof of vaccination and masks are required. The speaker's presentation will be virtual but the meeting is in-person. This will be an experimental approach which may be implemented for future meetings

### Speaker for October

#### Planetary Archaeology: Exploring the final stages of planetary life cycles

Sam Grunblatt will investigate some of the shortest planetary systems found around red giant stars. Then he will compare these systems to similar extreme systems found around main sequence stars and discuss how these extremely inhospitable worlds can teach us about the fate of our own solar system. Then he will talk about what we can learn from studying red giant star some selves, and how they could be the key to finding the first planet from another galaxy in the near future.

## Officers to be voted in December!

Remember that nominations for Officers will be needed in November. Our current officers are:

President - Jack Chastain

Vice President: Tim Denman

Treasurer: Eric Myers

Secretary: James Rockrohr

Newsletter: Rick Versace

Publicity: Tim Denman

In October, a "Nomination Committee" should be assigned. We would like to ask for someone to step forward and assume this MINIMAL TASK!

In addition, the four elected Directors are:

Joe Macagne, Steve Carey, Willie Yee, Karl Loatman

Please consider running for any of the above positions, or serving as the "nominating committee" and help us out!

### New Public Events

Events are starting to pick up! We have a couple of requests for Scopes that will be amplified soon. Please consider volunteering your time for these upcoming events:

- **Saugerties High School** - No date decided upon yet, but probably late October. This is an event we have supported for several years now and presents the night sky to all grades at the Saugerties school. Usually very well attended and a great evening for everyone.
- **Mohonk Mountain House** - THREE weekends! - Oct 29,30, Nov 5, 6 and Nov 19,20. This could be more naked-eye than telescopes, but the option for scopes is there and I would like to plan for a few. The event will bring in some money as well - \$100 per night to MHAA. The event is basically a large company "private party" and normally supported by Raj Pandaya, who is unavailable this year. Contact Jack Chastain if you are willing to help out for any or all nights!
- PROPOSED: Recently received request for **Opus 40**, an interesting "Earthwork Sculpture" near Saugerties. This is presumed to be a paid event and as such should also have some donation money to the group. No date yet.

Please consider helping out at any of these events!

~~~~~

## Minutes of the monthly meeting of the Mid Hudson Astronomical Association, September 21, 2021

The meeting was called to order at 7:30 PM by President Jack Chastain on the online application Zoom.

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

### Officer's Reports:

**President:** Jack Chastain was present.

- Discussed progress on online star parties. Still need some helpers to manage Zoom windows, etc. See Jack or Eric Myers or Tim Denman.

**Vice President:** Tim Denman was present.

- Nothing to report

**Secretary:** Jim Rockrohr was present.

- Nothing to report.

**Treasurer:** Eric Myers was present.

- See the newsletter for the latest information.

**Publicity:** (Need a volunteer. Tim Denman is covering.)

- Sent out publicity for this meeting as well as the October Star Party.

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

- No report.

**Webmaster:** Steve Dittmar was present.

- Steve reports that he's planning to release the site to the public in the next month.

**Outreach:** Joe McCagne was not present.

- We need someone to assist Joe.
- Requests for events are coming in via Facebook and MeetUp. See below.

**Upcoming Programs:** Alexandra Passas was present.

- Alex now has speakers from the Natural History Museum for the next couple of months.

**Membership:** Rick Versace was not present. Eric reported:

- We have added at least one SUNY New Paltz student to our membership.
- We need to find a way remind people since we no longer use the automatic notices in MemberPlanet. Steve's web page may be able to do it once fully online.
- We need to stress to people that just because they are on our MeetUp they are not automatically a member of MHAA.

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

- Mentioned recent civilian launch and recovery.
- Applications to become a Solar System Ambassador are available through the month of September.

#### **Old Business:**

- The last club star party was Friday, September 10<sup>th</sup>.
  - Very good sky conditions.
  - Huge turnout!
- Rhinebeck library event had several telescopes and about 60 people, ages "5 to 90".
- Need imagers to put views on Zoom for the virtual star parties. See Jack or Eric.
- Eric reported good success with the "robo-cam" to put our star parties online.
  - Also had 2 imagers online: Tim at home and Ryan at the park.
  - Zoom Breakout Rooms appear to work with scopes. Working on details.

#### **New Business:**

- Lots of requests for events:
  - Desmond Fish Library, 10/14.
  - Saugerties High School, date in October TBD
  - Fishkill Plains School, date TBD
  - Opus 40, paid event, date TBD
  - Mohonk Mountain House:
    - 3 weekends; Friday and Saturday evenings.
      - 10/29-30
      - 11/5-6
      - 11/19-20

- A “large company” rents Mohonk for its employees.
- \$100/night to the club
- They are expecting naked eye show-and-tell, but we plan to bring ‘scopes.
- Nominations for officers are due.
- Do we want to do an annual dinner this year?
  - Where? When? Let Jack know.
- The club has received a new donation of an 8” Meade SCT with a manual mount.
  - Jack is checking it out and it looks very good, so far.
- 
- Question about when we might return to SUNY for live meetings.
  - Eric reported that SUNY will begin to allow groups that are fully masked (and vaccinated?) to attend open meetings in October or November.
  - He has submitted our room application and is waiting for the “official” approval.
  - MHAA will require proof of vaccination when we return to in-person indoor meetings.

### Upcoming Events

- **Next Club Star Party:** October 8<sup>th</sup> at Lake Taghkanic State park. See MeetUp and YOU MUST RSVP with car make, model and license plate number to attend.
- **Beekman Library:** Looking for telescopes on October 2<sup>nd</sup>. See Eric if interested.
- **Desmond Fish Library, Garrison, NY:** October 14<sup>th</sup>. See Eric or Jack if interested.
- **IOMN (International Observe the Moon Night):** October 16<sup>th</sup> at SUNY New Paltz observatory.
- **Mohonk Mountain House:** Looking for speakers on “Astronomy Weekends”; October 29/30, November 5/6, and November 19/20. Contact Jack if you want to help.
- **Saugerties High School:** Looking for an event for a TBD date in October.

### Observing Reports:

- None

The business meeting was adjourned at 8:03 PM. There were 28 Zoom windows open at the end of the business meeting. **The next meeting is October 19<sup>th</sup>, 2021, on Zoom. Check MeetUp for details and link. Link will be sent to all those that RSVP.**

The presentation that followed was by Pierre Merchand, Post-doc at the Museum of Natural History: “The Role of Magnetic Fields in Star Formation”.

Submitted by James Rockrohr, October 16<sup>th</sup>, 2021.



## **MHAA Treasurer’s Report for October 2021**

As of 16 October 2021 we have \$3,410.07 in our bank account and \$119.05 in our PayPal account, with the Treasurer holding \$40 in petty cash. We just paid our monthly bill for Zoom for \$14.99 out of our PayPal account, and we have one new member, paid via PayPal.

We currently have about 40 active paid members, and 25 people who are not current in their dues this year. It’s not their fault, because we don’t have a mechanism for reminding them. I will try to bring a list to the meeting so that anybody who wants to check their status with me can do so.

Respectfully Submitted,  
Eric Myers  
Treasurer





This article is distributed by NASA Night Sky Network

## Weird Ways to Observe the Moon

David Prosper

International Observe the Moon Night is on October 16 this year— but you can or night! While binoculars and telescopes certainly reveal incredible details of our neighbor’s surface, bringing out dark seas, bright craters, and numerous odd fissures and cracks, these tools are not the only way to observe details about our Moon. There are more ways to observe the Moon than you might expect, just using common household materials.

Put on a pair of sunglasses, especially polarized sunglasses! You may think this is a joke, but the point of polarized sunglasses is to dramatically reduce glare, and so they allow your eyes to pick out some lunar details! Surprisingly, wearing sunglasses even helps during daytime observations of the Moon.

One unlikely tool is the humble plastic bottle cap! John Goss from the Roanoke Valley Astronomical Society shared these directions on how to make your own bottle cap lunar viewer, which was also suggested to him by Fred Schaaf many years ago as a way to also view the thin crescent of Venus when close to the Sun:

“The full Moon is very bright, so much that details are overwhelmed by the glare. Here is an easy way to see more! Start by drilling a 1/16-inch (1.5 mm) diameter hole in a plastic soft drink bottle cap. Make sure it is an unobstructed, round hole. Now look through the hole at the bright Moon. The image brightness will be much dimmer than normal – over 90% dimmer – reducing or eliminating any lunar glare. The image should also be much sharper because the bottle cap blocks light from entering the outer portion of your pupil, where imperfections of the eye’s curving optical path likely lie.” Many report seeing a startling amount of lunar detail!

You can project the Moon! Have you heard of a “Sun Funnel”? It’s a way to safely view the Sun by projecting the image from an eyepiece to fabric stretched across a funnel mounted on top. It’s easy to make at home, too – directions are here: [bit.ly/sunfunnel](http://bit.ly/sunfunnel). Depending on your equipment, a Sun Funnel can view the Moon as well as the Sun— a full Moon gives off more than enough light to project from even relatively small telescopes. Large telescopes will project the full Moon and its phases, with varying levels of detail; while not as crisp as direct eyepiece viewing, it’s still an impressive sight! You can also mount your smartphone or tablet to your eyepiece for a similar Moon-viewing experience, but the funnel doesn’t need batteries.

Of course, you can join folks in person or online for a celebration of our Moon on October 16, with International Observe the Moon Night – find details at [moon.nasa.gov/observe](http://moon.nasa.gov/observe). NASA has big plans for a return to the Moon with the Artemis program, and you can find the latest news on their upcoming lunar explorations at [nasa.gov](http://nasa.gov).



*Sun Funnels in action! Starting clockwise from the bottom left, a standalone Sun Funnel; attached to a small refractor to observe the transit of Mercury in 2019; attached to a large telescope in preparation for evening lunar observing; projection of the Moon onto a funnel from a medium-size scope (5 inches). Safety tip: NEVER use a large telescope with a Sun Funnel to observe the Sun, as they are designed to project the Sun using small telescopes only. Some eager astronomers have melted their Sun Funnels, and parts of their own telescopes, by pointing them at the Sun - large telescopes create far too much heat, sometimes within seconds! However, large instruments are safe and ideal for projecting the much dimmer Moon. Small telescopes can't gather enough light to decently project the Moon, but larger scopes will work.*



International OBSERVE  
THE MOON NIGHT 2021

SATURDAY  
OCTOBER 16<sup>TH</sup>



NORTHERN HEMISPHERE MOON MAP WITH  
LUNAR MARIA (SEAS OF BASALT)

**Moon Map**

This map was created for International Observe the Moon Night 2021. It depicts the Moon as it will appear from the northern hemisphere at approximately 11:00 PM EDT on October 16, 2021 (3:00 AM UTC on October 17).

**Lunar Maria (Seas of Basalt)**

You can see a number of maria tonight. Once thought to be seas of water, these are actually large, flat plains of solidified basaltic lava. They can be viewed in binoculars or even with the unaided eye. Tonight, you may be able to identify 18 maria on the Moon. This includes four seas along the eastern edge that are often hard to see. Because of libration, a slight apparent wobble by the Moon in its orbit around Earth, tonight we get to peek slightly around the northeast edge of the Moon, glimpsing a sliver of terrain normally on the Moon's far side.



Map generated with NASA's Dial-A-Moon  
(<https://svs.gsfc.nasa.gov/4874>)



- |                                          |                                              |                                 |
|------------------------------------------|----------------------------------------------|---------------------------------|
| A. Mare Frigoris (Sea of Cold)           | H. Mare Vaporum (Sea of Vapors)              | O. Mare Anguis (Serpent Sea)    |
| B. Mare Imbrium (Sea of Rains)           | I. Mare Serenitatis (Sea of Serenity)        | P. Mare Marginis (Border Sea)   |
| C. Mare Insularum (Sea of Isles)         | J. Mare Tranquillitatis (Sea of Tranquility) | Q. Mare Undarum (Sea of Waves)  |
| D. Oceanus Procellarum (Ocean of Storms) | K. Mare Nectaris (Sea of Nectar)             | R. Mare Spumans (Sea of Foam)   |
| E. Mare Cognitum (Known Sea)             | L. Mare Fecunditatis (Sea of Fertility)      | S. Mare Smythii (Smyth's Sea)   |
| F. Mare Humorum (Sea of Moisture)        | M. Mare Crisium (Sea of Crises)              | T. Mare Australe (Southern Sea) |
| G. Mare Nubium (Sea of Clouds)           | N. Mare Humboldtianum (Humboldt's Sea)       |                                 |

MOON.NASA.GOV/OBSERVE

#ObserveTheMoon

## 2021 Star Party Schedule

|              |         |
|--------------|---------|
| January 15   | 4:30 PM |
| February 12  | 5:30 PM |
| March 12     | 6:00 PM |
| April 9      | 7:30 PM |
| May 14       | 8:00 PM |
| June 11      | 8:30 PM |
| July 9       | 8:30 PM |
| August 6     | 8:00 PM |
| September 10 | 7:00 PM |
| October 8    | 6:30 PM |
| November 5   | 5:30 PM |
| December 3   | 4:30 PM |



### 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).