

Mid-Hudson Astronomical Association June, 2021

Website: 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

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 June 15th, 2021, on Zoom. Check MeetUp for details and link. Link will be sent to all those that RSVP

Speaker for June

Denver Amateur Astronomer to Describe How to Build a Radio Telescope

Kevin Lloyd lives in Denver CO. He has been working with radio telescopes of his own design for the last 15 years, but his inspiration comes from an event that happened in middle school. Mr Lloyd's instuctions are meant for a twelve year old to to be capable of following and do not require an engineering degree.

Lectures Opportunity

submitted by Alex Passas

I recently discovered an online source of astronomy lectures. The AmateurAstronomers Association offers online lectures at 7 PM on the second Tuesday of each month. Their website is aaa.org. If you open that up you go to events then calendar and click on the word lecture on the second Tuesday. Scroll down to register. Have fun!

Minutes of the monthly meeting of the Mid Hudson Astronomical Association, May 18, 2021

The meeting was called to order at 7:32 PM by President Jack Chastain on the online application Zoom.

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

Officer's Reports:

President: Jack Chastain was present.

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

Vice President: Tim Denman was present.

- Discussed publicity, see below.

Secretary: Jim Rockrohr was present.

- Nothing new to report.

Treasurer: Eric Myers was present.

- See the newsletter for the latest information.
- Eric furnished some checks for the Dutchess County Science Fair awards
 - o Still to be cashed.
- Motion was made to increase the amount for solar glasses by \$93.00 to recover shipping on 200 pairs. Seconded and passed with no objections.

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

- No press on live star parties until Covid restrictions lifted.
- Newspapers are restarting their calendars of events so he is submitting to them. Let Tim know if you see us mentioned.

Newsletter: Rick Versace was not present.

Webmaster: Steve Ditmar was present.

- Nothing new to report.

Upcoming Programs: Alexandra Passas was present.

- June (Radio Astronomy) and July (Super Earths to Super Jupiters) meetings are covered. Working on future speakers.

Membership: Rick Versace was not present.

Solar System Ambassador: Willie Yee was not present.

Outreach: Joe McCagne was not present.

- Eric Myers reported that the Walkway night events are restarting in June and they would like us to participate. Contact Eric for details.
- Eric also reported that he is trying to get them to open the Walkway on the morning of June 10th for the annular solar eclipse.

Old Business:

- The last club star party was last Friday.
 - Not too bad; broken clouds
 - o 35-40 total participants with at least 7 first timers.
 - o Saw a pass of the new Chinese space station followed by the ISS.
- Discussion held on whether we need to have a club member or officer at our star parties at Lake Taghkanic.
 - O Jack said that it was not required, but nice to have.
 - o Someone at the star party should have a copy of our event permit in case asked.

• Still looking for member images for zoom.

New Business:

- Question about when we might return to SUNY for live meetings. Eric has nothing "official" yet, but all students will be required to be vaccinated next fall. It might be possible for outside groups that are fully vaccinated to use the facilities at that time.

Upcoming Events

- Next Club Star Party: June 11 at Lake Taghkanic State park. See MeetUp and YOU MUST RSVP with car make, model and license plate number to attend.
- **Annular Solar Eclipse:** June 10. Only partial annulus (scimitar) here. We may do a walkway event as viewing will be good from the bridge.

Observing Reports:

• Karl Loatman has photos of the recent planetary conjunctions on slack.

Visitors/New Members:

There were about 15 Zoom windows in attendance at the end of the business meeting.

The business meeting was adjourned at 8:03 PM. The next meeting is June 15th, 2021, on Zoom. Check MeetUp for details and link. Link will be sent to all those that RSVP.

The presentation that followed was by our members Jack Chastain, Eric Myers, and Tim Denman on the progress of their work to get our star parties on Zoom.

Submitted by James Rockrohr, June 13th, 2021.

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#### MHAA Treasurer's Report for June 2021

As of 13 June 2021 we have \$3,270.02 in our bank account and \$138.23 in our PayPal account. I expect our monthly payment of \$14.99 for Zoom to be paid via PayPal this week. I took in \$40 for shirts, so right now I'm holding \$95 in petty cash. We still have \$75 in outstanding checks for two prizes given to participants in the Dutchess County Regional Science Fair.

Last month I purchased 200 pairs of eclipse glasses and then gave 150 of these to the Friends of the Walkway for the eclipse on the morning of June 10th, for which they will repay us at cost. I distributed some of the glasses to our members, but still have about 25 pairs to hand out.

Respectfully Submitted,

Eric Myers

Treasurer



This article is distributed by NASA Night Sky Network

#### **Astrophotography With Your Smartphone**

**David Prosper** 

Have you ever wanted to take night time photos like you've seen online, with the Milky Way stretched across the sky, a blood-red Moon during a total eclipse, or a colorful nebula? Many astrophotos take hours of time, expensive equipment, and travel, which can intimidate beginners to astrophotography. However, anyone with a camera can take astrophotos; even if you have a just smartphone, you can do astrophotography. Seriously!

Don't expect Hubble-level images starting out! However, you can take surprisingly techniques: steadiness, locked focus, long Celestron C8 telescope.



The Moon is large and bright, making it a great target for beginners. The author took both of these impressive shots by practicing several basic photos using an iPhone 6s. The crescent moon at sunset (left) was taken with a phone propped on the impressive shots by practicing several basic photos using an iPhone 6s. The crescent moon at sunset (left) was taken with a phone propped on the impressive shots by practicing several basic photos using an iPhone 6s. The crescent moon at sunset (left) was taken with a phone propped on the impressive shots by practicing several basic photos using an iPhone 6s. The crescent moon at sunset (left) was taken with a phone propped on the impressive shots by practicing several basic photos using an iPhone 6s. The crescent moon at sunset (left) was taken with a phone propped on the impressive shots by practicing several basic photos using an iPhone 6s. The crescent moon at sunset (left) was taken with a phone propped on the impressive shots by practicing several basic photos using an iPhone 6s.

exposure, and processing. First, steady your smartphone to keep your subjects sharp. This is especially important in low light conditions. A small tripod is ideal, but an improvised stand, like a rock or block of wood, works in a pinch. Most camera apps offer timer options to delay taking a photo by a few seconds, which reduces the vibration of your fingers when taking a shot. Next, lock your focus. Smartphones use autofocus, which is not ideal for low-light photos, especially if the camera readjusts focus mid-session. Tap the phone's screen to focus on a distant bright star or streetlight, then check for options to fine-tune and lock it. Adjusting your camera's exposure time is also essential. The longer your camera is open, the more light it gathers - essential for low-light astrophotography. Start by setting your exposure time to a few seconds. With those options set, take a test photo of your target! If your phone's camera app doesn't offer these options, you can download apps that do. While some phones offer an "astrophotography" setting, this is still rare as of 2021. Finally, process your photos using an app on your phone or computer to bring out additional detail! Postprocessing is the secret of all astrophotography.

You now have your own first astrophotos! Wondering what you can do next? Practice: take lots of photos using different settings, especially before deciding on any equipment upgrades. Luckily, there are many amazing resources for budding astrophotographers. NASA has a free eBook with extensive tips for smartphone astrophotography at <a href="bit.ly/smartastrophoto">bit.ly/smartphone</a> and you can also join the Smartphone Astrophotography project at <a href="bit.ly/smartphoneastroproject">bit.ly/smartphoneastroproject</a>. Members of astronomy clubs often offer tips or even lessons on astrophotography; you can find a club near you by searching the "Clubs and Events" map on the Night Sky Network's website at <a href="mightsky.jpl.nasa.gov">nightsky.jpl.nasa.gov</a>. May you have clear skies!



A small tripod for a smartphone. They are relatively inexpensive – the author found this at a local dollar store!

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### 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 |

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Directions To The Star Party Site

<u>Lake Taghkanic State Park</u> 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 Taghanic 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 <u>Meetup</u>). The park is patrolled by state police, and all non registered cars will be ticketted 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 <u>your</u> 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 <u>www.midhudsonastro.org</u>.