MHAA

Mid-Hudson Astronomical Association

July, 2021

Website: www.midhudsonastro.org

groups.io Group: mhaa.groups.io

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

Vice President: Tim Denman
Treasurer: Eric Myers
Membership Coordinator: Rick Versace
Webmaster: Steve Dittmar
Outreach: Joe Macagne
College Liaison: Dr. Amy Bartholomew

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

The next meeting is July 20th, 2021, on Zoom. Check MeetUp for details and link. Link will be sent to all those that RSVP.

Speaker for July

Super-Earths to Super-Jupiters: Understanding the Atmospheres of Exoplanets

Alex R. Howe, post doctoral researcher at NASA Goddard Spacefight Center, will be talking about his research focusing on his two main projects studying the atmospheres of planets outside our solar system and the techniques we use to study them. These include theoretical modeling of the evaporation of atmospheres from planets of Earth to Neptune-size, and spectroscopic analysis of the chemistry of the largest planets.

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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!
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Minutes of the monthly meeting of the Mid Hudson Astronomical Association, June 15, 2021

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

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

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.
- Tim will send a note to try and get a list of who will actually be at star parties and get cell phone numbers.
- Need to amend our MeetUp site to allow groups of any size now that restrictions have been lifted.
- We also need to update the mask rules to put on a mask if asked by someone, even if vaccinated.
- We will now restart advertising our star parties to the public in newspapers, etc.

Secretary: Jim Rockrohr was present.
- Nothing new to report.

Treasurer: Eric Myers was present.
- See the newsletter for the latest information.
- Account is healthy.
- We are expecting reimbursement from the Walkway organization for 150 solar glasses.

Publicity: (Need a volunteer. Tim Denman is covering.)
- We will restart advertising our star parties on Facebook.
- 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. Continuing web page development.

Upcoming Programs: Alexandra Passas was present.
- July: Alex Howe, NASA Goddard Spaceflight Center: "Super Earths to Super Jupiters".
- August: Don Pettit, Astronaut:

Membership: Rick Versace was not present.

Solar System Ambassador: Willie Yee was present. No news

Outreach: Joe McCagne was not present.

Old Business:
- Jack did an interview on WKFF
- The eclipse viewing on the Walkway on June 10th had 600 RSVPs and they gave away 500 solar glasses. There were 7 telescopes on the bridge. It was cloudy at sunrise, but cleared.
- Last Friday (June 11th) had another Walkway at Night event.
  - Moon and Venus were visible
  - Mars in and out of clouds.
  - 3 telescopes.
- The last club star party was Saturday, June 12th.
  - About 20 total participants and 4 telescopes.
  - Reasonable sky conditions.

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. Recommended to keep doing zoom anyway.

Upcoming Events

- **Next Club Star Party**: July 9 at Lake Taghkanic State park. See MeetUp and YOU MUST RSVP with car make, model and license plate number to attend.

Observing Reports:

- None

Visitors/New Members:

There were about 34 Zoom windows in attendance at the end of the business meeting.

The business meeting was adjourned at 8:00 PM. **The next meeting is July 20th, 2021, on Zoom. Check MeetUp for details and link. Link will be sent to all those that RSVP.**

The presentation that followed was by Kevin Lloyd: "Radio Telescopes 101".

Submitted by James Rockrohr, July 15th, 2021.

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MHAA Treasurer's Report for July 2021

As of 16 July 2021 we have $3433.76 in our bank account and $133.11 in our PayPal account, with a $50 check for one science fair prize still outstanding. This month I deposited $138.33 from the Friends of the Walkway for 150 pairs of eclipse sunglasses; $10 from Raj Pandya for 10 eclipse sunglasses; and $40 for t-shirt sales.

Prices are going up. This month our Zoom bill was $15.08, an increase of 9 cents.
PayPal has informed me that they are changing their service fee, which will increase the cost to us by 19 cents for each membership, assuming we keep the PayPal rate at $26.00.

Respectfully Submitted,
Eric Myers
Treasurer

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This article
is distributed by NASA Night Sky Network

Observe the Milky Way and Great Rift

David Prosper

Summer skies bring glorious views of our own Milky Way galaxy to observers blessed with dark skies. For many city dwellers, their first sight of the Milky Way comes during trips to rural areas - so if you are traveling away from city lights, do yourself a favor and look up!

To observe the Milky Way, you need clear, dark skies, and enough time to adapt your eyes to the dark. Photos of the Milky Way are breathtaking, but they usually show far more detail and color than the human eye can see – that's the beauty and quietly deceptive nature of long exposure photography. For Northern Hemisphere observers, the most prominent portion of the Milky Way rises in the southeast as marked by the constellations Scorpius and Sagittarius. Take note that, even in dark skies, the Milky Way isn't easily visible until it rises a bit above the horizon and the thick, turbulent air which obscures the view. The Milky Way is huge, but is also rather faint, and our eyes need time to truly adjust to the dark and see it in any detail. Try not to check your phone while you wait, as its light will reset your night vision. It's best to attempt to view the Milky Way when the Moon is at a new or crescent phase; you don't want the Moon's brilliant light washing out any potential views, especially since a full Moon is up all night.

The Great Rift is shown in more detail in this photo of a portion of the Milky Way along with the bright stars of the Summer Triangle. You can see why it is also called the "Dark Rift." Credit: NASA / A.Fujii

Keeping your eyes dark adapted is especially important if you want to not only see the haze of the Milky Way, but also the dark lane cutting into that haze, stretching from the Summer Triangle to Sagittarius. This dark detail is known as the Great Rift, and is seen more readily in very dark skies, especially dark, dry skies found in high desert regions. What exactly is the Great Rift? You are looking at massive clouds of galactic dust lying between Earth and the interior of the Milky Way. Other "dark nebulae" of cosmic clouds pepper the Milky Way, including the famed Coalsack, found in the Southern Hemisphere constellation of Crux. Many cultures celebrate these dark clouds in their traditional stories along with the constellations and Milky Way.

Where exactly is our solar system within the Milky Way? Is there a way to get a sense of scale? The "Our Place in Our Galaxy" activity can help you do just that, with only birdseed, a coin, and your imagination: bit.ly/galaxyplace. You can also discover the amazing science NASA is doing to understand our galaxy – and our place in it - at nasa.gov.

If the Milky Way was shrunk down to the size of North America, our entire Solar System would be about the size of a quarter. At that scale, the North Star, Polaris - which is about 433 light years distant from us - would be 11 miles away! Find more ways to visualize these immense sizes with the Our Place in Our Galaxy activity: bit.ly/galaxyplace

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

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 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 Meetup). 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 **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.
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