

June, 2023

Website: 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

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 June 20th, 2023, on Zoom and in person. Check MeetUp for details and link. Zoom link will be sent to all those that RSVP.

June Speaker

"Cradle of Creation: The Orion Molecular Cloud " Keith Murdock

This presentation takes us to one of the most spectacular and dynamic nearby neighborhoods in the Milky Way. Located only 1350 light-years away, the Orion Nebula (M42) consists of a large cloud of gas and dust excited and illuminated from within by ultraviolet and visible light from a multiple-star system containing at least 8 stars, including 4 blue super giants. Rockland Astronomy Club's planetary expert Murdock will give a guided tour through the features of this stunningly beautiful nebula and its constantly evolving surroundings – The Orion Molecular Cloud. Keith will also explain

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some of the nebula's astrophysics, illustrating why it is such a rich environment for forming new stars and planetary systems – a true Cradle of Creation.

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Online link to the MHAA monthly Business Meeting Agenda:

http://mhaa.midhudsonastro.org/agenda

### Minutes of the monthly meeting of the Mid Hudson Astronomical Association, May 16, 2023

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

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

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

President: Jack Chastain was present.

- Needs help with events. Please contact Jack if you can host and/or manage an event.
- We need a new position: Events Coordinator. See Jack if interested.

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

- 2 local libraries are looking for additional star parties;
  - Pine Plains Library
  - Millerton Library
  - No rain dates, use indoor presentation.

Recording Secretary: Jim Rockrohr was present.

- (Nothing to report)

Publicity: Tim Denman was present.

- Press releases are going out. If you see them tell Tim!
- Remember to ask people you talk to at our events how they heard about us and let Tim know so we can gauge our effectiveness.
- Tim will take over managing the park license plate list from Ken Bailey.

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

o (No report)

#### Treasurer: Eric Myers was present.

- See latest newsletter for numbers.
- We received a \$270 donation from Wildflower Farms for our work last December.

#### **Outreach:** (need a coordinator)

o No report

#### Speakers: Alex Passas was present.

Speakers booked to August.

#### Membership: Eric Myers was present

• See the newsletter

• 2 new members and 2 renewals this month.

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

Still looking for Eclipse Ambassadors. Go to EclipseAmbassadors.org.

### Webmaster: Steve Dittmar was not present

- Check out our new webpage if you haven't already.

### Old Business:

- Work with Poughkeepsie Discovery Museum's StarLab is underway. See Eric for details.
- Be sure to ask people how they found us and let Tim know.

### New Business and Events:

- Next Club star party this Friday (5/19) at Lake Taghkanic.
- Encourage people to join us on **MeetUp** to get notices of events and changes due to weather, etc.
- **Mohonk** looking for telescopes on 6/7. May be up to 300 people!
- 6/17(?) Solstice event at **Opus 40**. See Rick Versace if you can help.
- **IBM Poughkeepsie** hosts a science fair and is looking for solar telescopes. See Steve Dittmar.
- West Hurley Library is looking for a telescope training event with their telescopes. Dates TBD.
- **Bardavon and the Hudson Valley Philharmonic** will present "Holtz The Planets" with full visuals on the big screen. This Saturday evening (5/20).
- Innesfree is requesting two events:
  - 8/12 early in the morning: Persied meteor shower viewing.
  - 9/22 (?) Moon party with telescopes.
- West Point Star Party: 7/22 and 8/12 on the firing range. See Eric.
  - Audubon Club: Tim Denman no new news.
  - Sam's Point: Tim Denman still working on it.
  - The Fountains in Millbrook: TBD
- Getting requests from people in Germantown who want personal help with 'scopes. See Jack.
- People are finding us on the web.
- All of the events listed above are open to the public.

#### Reminders:

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

### **Observing Reports:**

- (none reported).

The business meeting was adjourned at 8:00 PM. There were 20 Zoom windows open at the end of the business meeting and approximately 14 people were in the Coykendall Auditorium. The next meeting is June 20<sup>th</sup>, 2023, 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 Shantha Thangiah, MBA, titled "Space Colonization: A Brief Trip to Jupiter's Moon Ganymede".

Submitted by James Rockrohr, June 15, 2023.

### MHAA Treasurer's Report for June 2023

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As of 19 June 2023 we have \$4036.65 in our bank account and \$2,618.54 in our PayPal account, with the Treasurer holding \$65 as petty cash. Our monthly payment of \$16.22 for Google gSuite was paid on the 1st of the month, and our monthly payment of \$15.99 for Zoom was paid on the 15th. Since the last meeting we took in \$150.88 in dues for 6 new members and \$150.08 for 6 membership renewals.

This month we received a check for \$65.35 from the settlement of a class-action privacy lawsuit against Zoom. I also received a similar (but smaller) payment for my personal Zoom account. Any of us who used Zoom a lot during the pandemic may be eligible, so if you don't get a notification then maybe check your spam folder.

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Respectfully Submitted, Eric Myers Treasurer

MHAA Membership Report for June 2023

As of 19 Jun 2023 the club has 74 paid members in good standing and 5 recently lapsed memberships. We now have 4 student members (we gained another this month) and 12 lifetime members. This month we had 6 membership renewals and gained 6 new regular members. Our Slack workspace has 66 "regular" members, which does not include 17 deactivated accounts or 48 invitations sent out but not used. We have 2384 followers who have subscribed to our site on Meetup.com, and over 1000 followers of our Facebook page.

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Respectfully Submitted, Eric Myers Acting Membership Coordinator



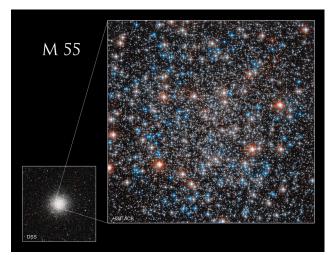
This article is distributed by NASA Night Sky Network The Night Sky Network program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit <u>nightsky.jpl.nasa.gov</u> to find local clubs, events, and more!

#### Find A Ball of Stars

Linda Shore, Ed.D

French astronomer Charles Messier cataloged over 100 fuzzy spots in the night sky in the 18<sup>th</sup> century while searching for comets – smudges that didn't move past the background stars so couldn't be comets. Too faint to be clearly seen using telescopes of the era, these objects were later identified as nebulas, distant galaxies, and star clusters as optics improved. Messier traveled the world to make his observations, assembling the descriptions and locations of all the

objects he found in his *Catalog of Nebulae and Star Clusters*. Messier's work was critical to astronomers who came after him who relied on his catalog to study these little mysteries in the night sky, and not mistake them for comets.

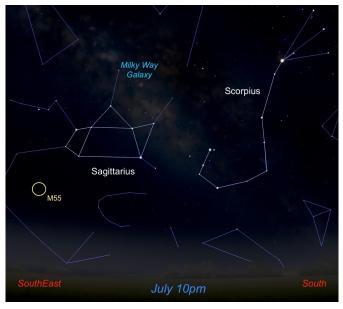


Most easily spotted from the Southern Hemisphere, this "faint fuzzy" was first cataloged by another French astronomer, Nicholas Louis de Lacaille in 1752 from Southern Africa. After searching many years in vain through the atmospheric haze and light pollution of Paris, Charles Messier finally added it to his catalog in July of 1778. Identified as **Messier 55 (M55)**, this large, diffuse object can be hard to distinguish unless it's well above the horizon and viewed far from city lights.

But July is great month for getting your own glimpse of M55 – especially if you live in the southern half of the US (or south of 39°N latitude). Also known as the "Summer Rose Star," M55 will

reach its highest point in northern hemisphere skies in mid-July. Looking towards the south with a pair of binoculars well after sunset, search for a dim (mag 6.3) cluster of stars below the handle of the "teapot" of the constellation Sagittarius. This loose collection of stars appears about 2/3 as large as the full Moon. A small telescope may resolve the individual stars, but M55 lacks the dense core of stars found in most globular clusters. With binoculars, let your eyes wander the "steam" coming from the teapot-shaped Sagittarius (actually the plane of the Milky Way Galaxy) to find many more nebulas and clusters.

As optics improved, this fuzzy patch was discovered to be a globular cluster of over 100,000 stars that formed more than 12 billion years ago, early in the history of the Universe. Located 20,000 light years from Earth, this ball of ancient stars has a diameter of 100 light years. Recently, NASA released a magnificent image of M55 from the Hubble Space Telescope, revealing just a small portion of the larger cluster. This is an image that Charles Messier could only dream of and would have marveled at! By observing high above the Earth's atmosphere, Hubble reveals stars inside the cluster impossible to resolve from ground-based telescopes. The spectacular colors in this image correspond to the surface temperatures of the stars; red stars being cooler than the white ones; white stars being cooler than the blue ones. These stars help us learn more about the



early Universe. Discover even more: https://www.nasa.gov/feature/goddard/2023/hubble-messier-55

The Hubble Space Telescope has captured magnificent images of most of Messier's objects. Explore them all: <a href="https://www.nasa.gov/content/goddard/hubble-s-messier-catalog/">https://www.nasa.gov/content/goddard/hubble-s-messier-catalog/</a>

### **Star Party Schedule**

| Date        | Arrival Time | Civil Dusk |
|-------------|--------------|------------|
| Jun 16 2023 | 8:30 PM      | 21:07 EDT  |
| Jul 14 2023 | 8:30 PM      | 21:02 EDT  |
| Aug 11 2023 | 8:00 PM      | 20:31 EDT  |
| Sep 15 2023 | 7:00 PM      | 19:32 EDT  |
| Oct 13 2023 | 6:00 PM      | 18:44 EDT  |
| Nov 10 2023 | 4:30 PM      | 17:07 EST  |
| Dec 8 2023  | 4:30 PM      | 16:54 EST  |
| Jan 5 2024  | 4:30 PM      | 17:09 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 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>.