

Website: www.midhudsonastro.org

President : Jack Chastain Secretary: Jim Rockrohr Newsletter Editor: Rick Versace Publicity: Tim Denman Speakers: Alexandra Passas groups.io Group: mhaa.groups.io

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

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

General Meeting on August 18 once again will be held via Zoom. Watch for the link from Meetup.

Minutes of the monthly meeting of the Mid Hudson Astronomical Association, July 21, 2020

The meeting was called to order at 7:31 PM by President Jack Chastain on the online application Zoom.

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

Officer's Reports:

President: The meeting is being recorded on Zoom. We will be continuing on Zoom for the foreseeable future.

Vice President: Tim Denman was not present.

Secretary: Jim Rockrohr was present. No news to report.

Treasurer: Eric Myers was present.

- See the newsletter for the latest information.
- We have about \$3,000 in the bank and no debts.
- PayPal owes us about \$150.00.
- MemberPlanet owes us about \$25.00.
- Our MeetUp subscription was renewed and we now own it (as opposed to using Paul Chauvet's account).
 - We are allowed 3 MeetUps in our account
 - One is MHAA, another is a local Star Trek Group.
 - The third will be offered to "MHAA South": the Kershaw County Area Astronomy Enthusiasts.
- T-shirts (\$15), sweatshirts (\$25) and pins (\$4) are available.
- Membership dues of \$25 per year can be paid by cash or check to Eric. Eric has PayPal set up which will cost \$1 more. You can also pay through MemberPlanet for a \$2 charge.

Publicity: Tim Denman was not present.

Newsletter: Rick Versace was not present.

Webmaster: Paul Chauvet was not present. Steve Dittmar will be assuming this position.

Outreach: Joe Macagne was not present.

Upcoming programs: Alexandra Passas was present.

- We have programs booked through September and working on future speakers.
- Will get information from Willie about speakers online through the Solar System Ambassadors.
- See MeetUp page for the latest information.

Membership: (need leader; Eric is handling it for now)

• How to become a member? Read about it under "MORE" on MeetUp.

Solar System Ambassador: Willie Yee was present.

• 7/30 – Launch window opens for Mars Rover launch. See NASA.gov for live coverage.

Old Business:

- The last club star party was an online planetarium show from Raj Pandya.
- The club did a Comet viewing event at Lake Taghkanic State Park; 10-12 people attended.
- Jack did an audio interview for Catskill Radio that broadcasts tonight (7/21).

New Business:

- Jack checked with Taghkanic State Park on rules during Phase 4. We can start live meetings with restrictions in August limited to 50 people with masks and 6' social distancing.
 - If we have more than 50 people, we can split into two (or more) widely spaced groups.
- Club scopes and cameras available to paid members,

Upcoming Events

- Next Club Star Party: August 21 at Lake Taghkanic State park.
- Saugerties Science Fair sometime in October.

Observing Reports:

- Comet Neowise many reports.
 - Alex saw Neowise West of Mohonk.
 - Willie observed west of Minnewaska.
- Jack was at Lake Minnewaska to observe the Mercury-Venus-Moon conjunction.

Visitors/New Members:

There were about 26 people in attendance on Zoom at the end of the business meeting.

The business meeting was adjourned at about 8:00 PM. The next meeting is August 18th, 2020, on Zoom. Check MeetUp for details and link. Link will be sent to all those that RSVP.

The presentation that followed was by Tom Field of Sky and Telescope magazine: "You can Almost Touch the Starts".

Submitted by James Rockrohr, August 14th, 2020.

MHAA Treasurer's Report for August 2020

As of 16 July 2020 we have \$3,087.95 in our bank account, from which \$14.99 is expected to be debited by Tuesday to pay for our monthly Zoom subscription. We still owe Paul Chauvet \$53.43 for the most recent Meetup bill, but he owes us \$13.37 for a donation on Meetup, so we actually only owe him \$40.06.

Now that we have primary control of our Meetup account it would be possible to accept dues payments via Meetup, but I found the price is much more than using PayPal or Member Planet. Still, we might enable the feature to be able to accept further donations.

Respectfully Submitted,

Eric Myers

Treasurer



Comet Neowise by Scott Ewart

finally got around to processing the images I took last Monday night (7/20/20). I shot a few from my front yard in twilight, then later walked a few blocks to where I could shoot in darkness. Still, I just barely managed to capture a hint of ion tail. That's a stack of 45 exposures, 5 seconds each (stars trail any longer) at ISO 3200. The comet's motion is noticeable over the 13 minutes. Maybe next comet I use my clock drive and take longer, less noisy subs at lower ISO.



Summer Triangle Corner: DenebSummer Triangle Corner: Deneb

David Prosper



The Summer Triangle is high in the sky after sunset this month for observers in the Northern Hemisphere, its component stars seemingly brighter than before, as they have risen out of the thick, murky air low on the horizon and into the crisper skies overhead. Deneb, while still bright when lower in the sky, now positively sparkles overhead as night begins. What makes Deneb special, in addition to being one of the three points of the Summer Triangle? Its brilliance has stirred the imaginations of people for thousands of years!Deneb is the brightest star in Cygnus the Swan and is positioned next to a striking region of

Long exposure shot of Deneb (brightest star, near center) in its richly populated Milky Way neighborhood. Photo credit: Flickr user jpstanley. populated Milky way neignoornood. Fnoto Creat. Fnoto Crea

the Milky Way, almost as a guidepost. The ancient Chinese tale

represented by the stars Altair and Vega - also features Deneb. In this tale the two lovers are cast apart to either side of the Milky Way, but once a year a magical bridge made of helpful magpies – marked by Deneb – allows the lovers to meet. Deneb has inspired many tales since and is a staple setting of many science fiction stories, including several notable episodes of Star Trek.

Astronomers have learned quite a bit about this star in recent years, though much is still not fully understood – in part because of its intense brightness. The distance to Deneb from our Sun was measured by the ESA's Hipparcos mission and estimated to be about 2,600 light years. Later analysis of the same data suggested Deneb may be much closer: about 1,500 light years away. However, the follow-up mission to Hipparcos, Gaia, is unable to make distance measurements to this star! Deneb, along with a handful of other especially brilliant stars, is too bright to be accurately measured by the satellite's ultra-sensitive instruments.

Deneb is unusually vivid, especially given its distance. Generally, most of the brightest stars seen from Earth are within a few dozen to a few hundred light years away, but Deneb stands out by being thousands of light years distant! In fact, Deneb ranks among the top twenty brightest night time stars (at #19) and is easily the most distant star in that list. Its luminosity is fantastic but uncertain, since its exact distance is also unclear. What is known about Deneb is that it's a blue-white supergiant star that is furiously fusing its massive stocks of thermonuclear fuel and

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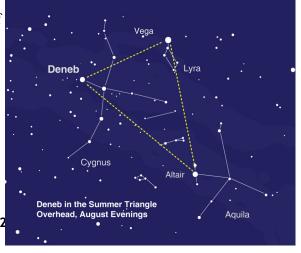


Figure 1: Spot Vega and the other stars of the Summer Triangle by looking straight up after sunset in August!

producing enough energy to make this star somewhere between 50,000 and 190,000 times brighter than our Sun if they were viewed at the same distance! The party won't last much longer; in a few million years, Deneb will exhaust its fuel and end its stellar life in a massive supernova, but the exact details of how this will occur, as with other vital details about this star, remain unclear.

Discover more about brilliant stars and their mysteries at nasa.gov.

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2020 Star Party Schedule

January 24	5:00 PM
February 21	5:30 PM
March 27	7:00 PM
April 24	7:30 PM
May 22	8:00 PM
June 19	8:30 PM
July 17	8:30 PM
August 21	7:30 PM
September 18	7:00 PM
October 16	6:00 PM
November 13	4:30 PM
December 11	4:30 PM
2021	
January 15	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 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:

• For the foreseeable future, all indoor meetings will be held on the 3rd Tuesday of each month in the Science Hall Bldg., SUNY New Paltz (directions below) at 7:30 PM. All indoor events are FREE! All are welcome. The presentations are generally geared towards teenagers and up.

• 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>.



The Meeting will be in the Science Hall, SH181 (The square at the South entrance area in the image). The building is at the corner of Rt 32 and Plattekill Ave. Parking is available on the road or possibly in the large Admin parking lot. The Bouton Hall and Mohonk parking are not necessarily recommended, particularly when college is in session. Parking is available on the street as well, and there are a couple spaces on the North West parking on the road - MAKE SURE they are unmarked places though!