

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 Forestell

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

General Meeting, June16 to once again be held via Zoom. Please use the following link to access the Zoom meeting beginning at 1930 Tuesday, 16 June:

https://us02web.zoom.us/j/89725239491?pwd=NHR2T0hqNWd4enMyUzJDK0dqQU41dz09

Minutes of the monthly meeting of the Mid Hudson Astronomical Association, May 19, 2020

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

The minutes of the April meeting were approved 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. SUNY New Paltz must come out of lockdown before we can use any of their facilities. Jack may need help monitoring meetings.

Vice President: Tim Denman was present. Alexandra Passas has agreed to take over the monthly speaker arrangements.

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

Treasurer: Eric Myers was present.

- See the newsletter for the latest information.
- We have about \$2800 in the bank and no debts.
- 4 new members last month and 3 renewals.
- 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 present. The Middletown Record ran a nice article this past month.

We need to have a way to insure that paid members can into our Zoom events. The last walkway event had well over 100 attendees and some of our members could not get in.

Newsletter: Rick Versace was not present.

Webmaster: Paul Chauvet was not present. No issues known. Steve Dittmar will help with web maintenance.

Outreach: Joe Macagne was not present.

Upcoming programs: Alexandra Passas was present.

- June will be Mike Bank.
- July will be a Solar System Walk at the SUNY campus.
- See MeetUp page for the latest information.

Membership: (need leader)

• (no report)

Solar System Ambassador: Willie Yee was present. Reminder that May 27 America Returns to Space with Falcon launch. See NASA.gov for live broadcast.

Old Business:

- We are paying for Zoom month to month as needed.
- Our 1st and 2nd virtual star parties were successful.
- The Walkway event had over 100 Zoom slots plus another 125 on Facebook Live.

New Business:

- Upcoming star party will be virtual on Zoom this Friday.
- Full key mapping for Stellarium is available in Files in Meetup.
- Club scopes and cameras available to paid members,

Upcoming Events

- Next Club Star Party: May 22; see above.
- Space Station Passes: 4 tonight, and 3 tomorrow night.
- Venus and Mercury conjunction.
- Venus, mercury, Moon, and ISS Saturday evening about 8:58 PM.
- Comet Swan: Thursday evening.

Observing Reports:

- (none reported)

Visitors/New Members:

There were about 22 people in attendance on Zoom at the end of the business meeting.

The business meeting was adjourned at about 8:03 PM. The next meeting is June 16th, 2020, on Zoom. Check Meetup for details and link. Link will be sent to all those that RSVP.

The presentation that followed was by Willy Yee; "Black Holes: Not so Black".

Submitted by James Rockrohr, June 14th, 2020.

MHAA Treasurer's Report for June 2020

As of 14 June 2020 we have \$2,810.03 in our bank account, with no outstanding checks or debts. We had four membership renewals this month, with no new members. We have a balance with PayPal of \$99.80, and a balance of \$149.94 with Member Planet.

According to Member Planet records, they made a Direct Deposit to our bank account of \$99.96 on 3 June 2020, but it has not shown up in our bank account. I have contacted them to see if they can find the problem. (I believe this has happened before with them.)

Respectfully Submitted, Eric Myers Treasurer



This article is distributed by NASA Night Sky Network

Summer Triangle Corner: Vega

David Prosper and Vivian White

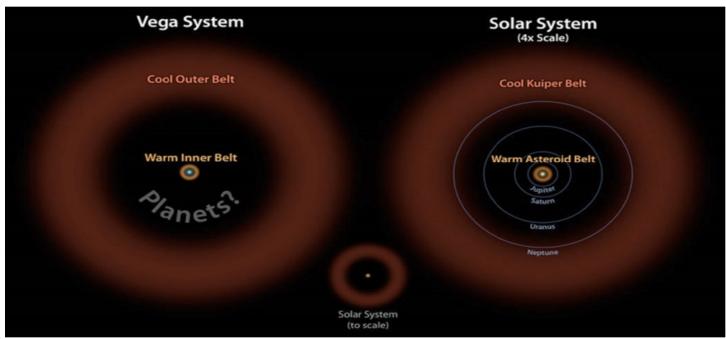
If you live in the Northern Hemisphere and look up during June evenings, you'll see the brilliant star **Vega** shining overhead. Did you know that Vega is one of the most studied stars in our skies? As one of the brightest summer stars, Vega has fascinated astronomers for thousands of years.

Vega is the brightest star in the small Greek constellation of Lyra, the harp. It's also one of the three points of the large "Summer Triangle" asterism, making Vega one of the easiest stars to find for novice stargazers. Ancient humans from 14,000 years ago likely knew Vega for another reason: it was the Earth's northern pole star! Compare Vega's current position with that of the current north star, Polaris, and you can see how much the direction of Earth's axis changes over thousands of years. This slow movement of axial rotation is called

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precession, and in 12,000 years Vega will return to the northern pole star position.Bright Vega has been observed closely since the beginning of modern astronomy and even helped to set the standard for the current magnitude scale used to categorize the brightness of stars. Polaris and Vega have something else in common, besides being once and future pole stars: their brightness varies over time, making them **variable stars**. Variable stars' light can change for many different reasons. Dust, smaller stars, or even planets may block the light we see from the star. Or the star itself might be unstable with active sunspots, expansions, or eruptions changing its brightness. Most stars are so far away that we only record the change in light, and can't see their surface.



ega possesses two debris fields, similar to our own solar system's asteroid and Kuiper belts. Astronomers continue to hunt for planets orbiting Vega, but as of May 2020 none have been confirmed. More info: bit.ly/VegaSystem Credit: NASA/JPL-Caltech

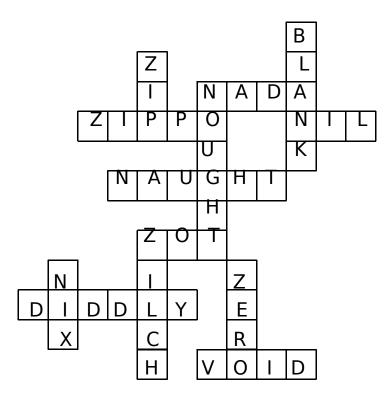
NASA's TESS satellite has ultra-sensitive light sensors primed to look for the tiny dimming of starlight caused by transits of extrasolar planets. Their sensitivity also allowed TESS to observe much smaller pulsations in a certain type of variable star's light than previously observed. These observations **of Delta Scuti** variable stars will help astronomers model their complex interiors and make sense of their distinct, seemingly chaotic, pulsations. This is a major contribution towards the field of astroseismology: the study of stellar interiors via observations of how sound waves "sing" as they travel through stars. The findings may help settle the debate over what kind of variable star Vega is. Find more details on this research, including a sonification demo that lets you "hear" the heartbeat of one of these stars, at: <u>bit.ly/DeltaScutiTESS</u>

Interested in learning more about variable stars? Want to observe their changing brightness? Check out the website for the American Association of Variable Star Observers (AAVSO) at aavso.org. You can also find the latest news about Vega and other fascinating stars at nasa.gov.

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Nothing



Down:

- 1. nothing
- 2. nothing
- 3. nothing
- 7. nothing
- 8. nothing
- 9. nothing

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Across:

- 3. nothing
- 4. nothing
- 5. nothing
- 6. nothing
- 7. nothing
- 10. nothing
- 11. nothing

2020 Star Party Schedule

January 24 5:00 PM February 21 5:30 PM March 27 7:00 PM 7:30 PM April 24 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.

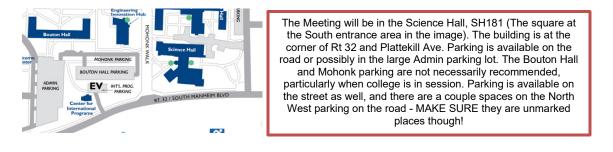
IMPORTANT: all events at Lake Taghkanic State Park require an **RSVP** which includes license plate number of the car you are bringing (please do so via <u>Meetup</u>). The park is patrolled by state police, and all non registered cars will be ticketted and risk our use of the park.

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>.



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