



Mid-Hudson Astronomical Association

December, 2020

Website: www.midhudsonastro.org

groups.io Group: [mhaa.groups.io](https://groups.io/g/mhaa)

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: Open

Webmaster: Steve Dittmar

Outreach: Joe Macagne

College Liaison: Dr. Amy Bartholomew

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

The next meeting is December 15th, 2020, on Zoom. Check MeetUp for details and link. Link will be sent to all those that RSVP.

Speaker for November

Various members will give short presentations.



Minutes of the monthly meeting of the Mid Hudson Astronomical Association, November 17, 2020

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

The minutes of the October meeting were approved unanimously as published in the newsletter with the following correction: The donation from the SUNY Asian Studies group is “expected” but not received as of the time of the October meeting. (It has since been received.)

Officer's Reports:

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

- Alex Passas has volunteered to be the nominating committee to present a slate of officers for next year. Thanks, Alex!
- Jack reminded everyone that Yahoo Groups is ending on December 15. All messages should move to Groups.io (main@mhaa.groups.io).
- Jack noted that all of the images being presented during the meeting tonight (over 30!) are from our members. If you have any you would like to share, send them to Jack.

Vice President: Tim Denman was present. He worked with the nominating committee and sent an email asking if the current officers would like to continue in their posts.

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

Treasurer: Eric Myers was present.

- See the newsletter for the latest information.
- We received the \$100 donation from the SUNY New Paltz Asian Studies group mentioned in last month's meeting minutes.
- 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.

Publicity: Tim Denman was present. Middletown Record is giving us good coverage.

- Let Tim know if you see any of our publicity.
- Star parties are published only on MeetUp to restrict attendance during the pandemic.

Newsletter: Rick Versace was not present.

- Jack to remind Rick to drop the directions to the SUNY New Paltz Science Hall for now since we are not meeting there.

Webmaster: Steve Dittmar was present.

- Still working on a proof-of-concept website. Close to releasing the public side of the website.

Outreach: Joe Macagne was not present.

- Willie Yee mentioned that Olana has reached out to Joe to arrange something for December. Stay tuned.

Upcoming programs: Alexandra Passas was present.

- December: Traditionally member presentations. So far, Jack and Eric Myers have volunteered.
- January: Seth McGowan, Adirondack Astronomy.
- See MeetUp page for the latest information.

Membership: (needs leader; Eric Myers is handling it for now but needs help.)

- Eric will be dropping MemberPlanet.
- Once new website is up and running Eric would like to have the membership job transition to a new person.
- There is a Google Form for member applications.
- How to become a member? Read about it under "MORE" on MeetUp.

Solar System Ambassador: Willie Yee was present.

- Willie is giving his Chinese Astronomy talk to the Long Island AOS group in January.
- Willie giving his Star Trek Magic Show to the Westchester Astronomy club on January 29.
- Osiris-Rex touchdown went well
- Launch of Falcon 9 to the ISS coming up soon.
- Perseverance rover lands on Mars February 18.

Old Business:

- The last star party was moved to Saturday. Eventually had some clear skies. About 18 people attended.

New Business:

- Officers are to be presented for nomination at the next (December) meeting and will be voted on at that meeting.
- Next star party is December 11. Geminid Meteor Shower peaks on December 13-14.
- Jupiter-Saturn conjunction closest on December 21 in southwest just after sunset. There was some discussion of possibly arranging a viewing event. Discussion to continue on Slack.
- There will be a virtual Star Walk on the Walkway over the Hudson on 12/20 (or 12/13 TBD). Looking for presenters. Eric Myers coordinating.
- Club scopes and cameras are available to paid members.
- Indoor meetings are not likely for quite a while due to SUNY guidelines.

Upcoming Events

- **Next Club Star Party:** December 11 at Lake Taghkanic State park. See MeetUp and RSVP with car make, model and license plate number to attend.

Observing Reports:

- Good views of Mars lately.

Astronaut Don Pettit from Texas is in the audience. Welcome!

Visitors/New Members:

There were about 35 Zoom windows in attendance at the end of the business meeting.

The business meeting was adjourned at 8:00 PM. **The next meeting is December 15th, 2020, on Zoom. Check MeetUp for details and link. Link will be sent to all those that RSVP.**

The presentation that followed was by T. J. Connelly of the Adirondack Sky Center: “Safely viewing and Imaging the Sun.”

Submitted by James Rockrohr, December 12th, 2020.



New Telescope

The Association has received a donated telescope - a Celestron Celestar. There's some interesting stuff on this that I have not been able to look at yet - though the scope is rumoured to have a bad motor. I have not had the time yet to do anything with the telescope and the person making the donation would like to receive a valuation (for tax purposes).

If anyone would like to take this telescope and check it out for operation and any possible repair needs, please let me know! It's not likely that I will get to it before next year sometime. There are manuals and everything!



MHAA Treasurer's Report for December 2020

As of 13 December 2020 we have \$3,490.53 in our bank account and \$270.59 in our PayPal account, with the Treasurer holding \$15 in petty cash.

This month we received a donation of \$125 from Willie Yee, which was part of the honorarium he was given for a talk he delivered to the Westchester Amateur Astronomers. We also received a donation of \$150 after Jack Chastain helped someone local with their telescope. We received dues from 5 new members, and 2 renewals.

Our monthly Zoom bill is now being paid out of our PayPal balance rather than from our checking account. Right now we are paying month to month, but we could save (a little) if we paid for 6 or 12 months at a time, if we know that we will continue to use it that long. I suspect we will, but this is something the club should discuss.

Respectfully Submitted,
Eric Myers
Treasurer

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### Officer elections the month

It's that time again. Every December, MHAA elects its officers for the following year. The following positions are elected, along with those currently in the position . They are the current candidates:

President - Jack Chastain  
Vice President - Tim Denman  
Treasurer - Eric Myers  
Secretary - James Rockrohr  
Newsletter Editor - Rick Versace  
Publicity Chairperson - Open (Tim Denman filling in)

Directors (Steering Committee) - Joe Macagne, Steve Carey, Willie Yee, Karl Loatman

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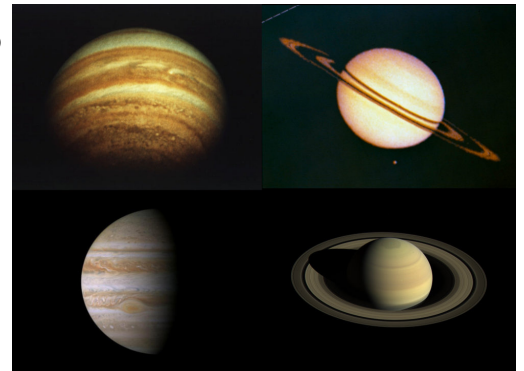
## Visitors to Both Jupiter and Saturn

David Prosper

Have you observed Jupiter and Saturn moving closer to each other over the past few months? On December 21, the two worlds will be at their closest, around 1/5 of a full Moon apart! While the two gas giants may *appear* close, in reality they are hundreds of millions of miles apart. Despite this vast distance, a select few missions have visited both worlds by using a gravity assist from giant Jupiter to slingshot them towards Saturn, saving time and fuel.

Pioneer 11 was the first mission to visit both worlds! Launched in 1973, the probe flew past Jupiter in late 1974, passing just 26,400 miles above its stormy clouds. In 1979, it became the first spacecraft to encounter Saturn. Pioneer 11 took the first up-close photos of Saturn and its satellites, and made many exciting discoveries, including the detections of its magnetic field and a faint “F” ring, before departing Saturn and eventually, the solar system.

The Voyager missions quickly followed up, taking a “Grand Tour” of the four largest and most distant planets in our solar system. Both probes were launched within two weeks of each other in 1977. Voyager 1 flew past Jupiter in March 1979, discovering Jupiter’s faint ring and two new moons, along with active volcanoes on Io’s surface! The probe then flew past Saturn in November 1980, discovering five new moons, a new “G” ring, mysterious ring “spokes,” and “shepherd moons” shaping the rings. After a brief encounter with Titan revealed evidence of complex organic chemistry and liquid on the moon’s frigid surface, Voyager 1 was flung out of the plane of the solar system. Following close behind, Voyager 2 took detailed photos of Jupiter’s moons and cloud tops in July 1979. Flying past Saturn in August 1981, Voyager 2 measured the thickness of Saturn’s rings and took detailed photos of many of its moons. This second explorer then captured images of Uranus and Neptune before leaving our solar system.



*The difference in technology between generations of space probes can be stunning! The top two photos of Jupiter and Saturn were taken by Pioneer 11 in 1974 (Jupiter) and 1979 (Saturn); the bottom two were taken by Cassini in 2000 (Jupiter) and 2016 (Saturn). What kinds of photos await us from future generations of deep space explorers?*

Cassini-Huygens was the last mission to visit both worlds. Launched in 1997, the mission flew past Jupiter in late 2000 and took incredibly detailed photos of its stormy atmosphere and faint rings. Cassini entered into Saturn’s orbit on July 1, 2004. The Huygens probe separated from Cassini, landing on Titan to become the first probe in the outer solar system. Cassini discovered geysers on Enceladus, fine details in Saturn’s rings, many more moons and “moonlets,” the changing oceans of Titan, and seasonal changes on Saturn itself. After revolutionizing our understanding of the Saturnian system, Cassini’s mission ended with a fiery plunge into its atmosphere on September 15, 2017.

What’s next for the exploration of the outer worlds of our solar system? While Juno is currently in orbit around Jupiter, there are more missions in development to study the moons of Jupiter and Saturn. Discover more about future NASA missions to the outer worlds of our solar system at [nasa.gov](https://www.nasa.gov).

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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

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 Taghkanic 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 ticketed 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.