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 January, 2019}Website: www.midhudsonastro.org
President : Jack Chastain
Secretary: Jim Rockrohr
Newsletter Editor: Rick Versace
Publicity: Tim Denman
Speakers: Paul Granich
Board of Directors: Joe Macagne, Steve Carey, Willie Yee

Yahoo Group: MHAstro
Vice President: C. E. Raum
Treasurer: Eric Myers
Membership Coordinator: C. E. Raum
Webmaster: Paul Chauvet
Outreach: Joe Macagne
College Liaison: Dr. Amy Forestell

## Minutes of the monthly meeting of the Mid Hudson Astronomical Association, December 18, 2018

The meeting was called to order at 7:31 PM by President Jack Chastain in the Coykendall Science Center Auditorium at SUNY, New Paltz, NY.

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

## Officer's Reports:

President: Jack has sent a Google Document link to the Steering Committee members for review and comment. He is incorporating the comments he has received, so far. He hopes to have a version to vote on by the February meeting. He also instructed the Treasurer to use his address for the bank accounts for the association.

Vice President: Paul Granich was not present.
Membership: Caryn Sobel was not present.
Treasurer: Karen Tulchinski was present. She reported a current balance of $\$ 2,528.42$.
Publicity/ Webmaster: Paul Chauvet was not present. There are no issues reported with the web page or MeetUp.

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## Outreach:

- Joe Macagne was not present.


## Upcoming programs:

- None reported.
- See MeetUp page for the latest information.


## Old Business:

- December Club Star Party was very cold. 8 people attended.
- Club telescopes are available to paid-up members:

1. 13" dobsonian, currently with Jack Chastain, is available.
2. ETX125 maksutov, currently with Joe Macagne.
3. 4" Tasco refractor on an EQ mount, currently with Karl Loatman.
4. New (to club) $8^{\prime \prime}$ dobsonian - needs some screws and springs for mirror mount and a finder scope (Willie may have one). It has one eyepiece.
5. New (to club) $21 / 2$ " Tasco refractor; to be junked.
6. A planetary camera and a "deep space" camera are available. See Willie.

## New Business:

- Next Club Star Party: January 11, 7 PM. Be sure to RSVP with car license plate number, make and model of your car by the Thursday evening before the star party, even if there is only a remote chance that you will attend on Friday evening or Saturday, if postponed due to weather. It's better to have too many people on the list rather than someone who isn't registered.
- We need to publish 2019 star party schedule: C.E. Raum to handle this.
- Wappingers Library is looking for a star party. Details and dates TBD.
- Annual Dinner: January 12 at 6:30 PM at The Would restaurant. RSVP to Jack Chastain to get a headcount.
- Election of Officers for 2019:
- There was no nominating committee report. The following names were nominated from the floor:
- President: Jack Chastain
- Vice President: C. E. Raum
- Treasurer: Eric Myers
- Secretary: Jim Rockrohr
- Newsletter editor: Rick Versace
- Publicity: Tim Denman
- The slate was elected unanimously.
- Other non-elected officers for 2019 include:
- Board of Directors: Willie Yee, Joe Macagne, Steve Carey
- Membership Coordinator: C. E. Raum
- Web Master: Paul Chauvet
- Outreach coordinator: Joe Macagne
- Reminder that dues are due! \$25 cash or check, \$26 through PayPal.


## Observing Reports:

- None reported.


## Visitors/New Members:

There were about 15 people in attendance at the end of the business meeting.
The business meeting was adjourned at about 8:00 PM. The next meeting is on January $\mathbf{1 5}{ }^{\text {th }}, \mathbf{2 0 1 9}$, in the Coykendall Auditorium at SUNY, New Paltz.

The presentation that followed was a presentation about the Chinese astronomer Yi Xing (683-727) by Willie Yee along with a raffle of books and a magic show. A pot luck of Christmas goodies and conversation followed.

Submitted by James Rockrohr, January 9 ${ }^{\text {th }}, 2019$.


January's Evening Eclipse and Morning Conjunctions
By David Prosper

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 nightsky.jpl.nasa.org to find local clubs, events, and more!

Observers in the Americas are treated to an evening total lunar eclipse this month. Early risers can spot some striking morning


Have you ever wondered how eclipses occur? You can model the Earth-Moon system using just a couple of small balls and a measuring stick to find out! The "yardstick eclipse" model shown here is set up to demonstrate a lunar eclipse. The
"Earth" ball (front, right) casts its shadow on the smaller "Moon" ball (rear, left). You can also simulate a solar eclipse just by flipping this model around. You can even use the Sun as your light source! Find more details on this simple eclipse model at bit.ly/vardstickeclipse conjunctions between Venus, Jupiter, and the Moon late in January.

A total lunar eclipse will occur on January 20th and be visible from start to finish for observers located in North and South America. This eclipse might be a treat for folks with early bedtimes; western observers can even watch the whole event before midnight. Lunar eclipses takes several hours to complete and are at their most impressive during total eclipse, or totality, when the Moon is completely enveloped by the umbra, the darkest part of Earth's shadow. During totality the color of the Moon can change to a bright orange or red thanks to the sunlight bending through the Earth's atmosphere - the same reason we see pink sunsets. The eclipse begins at 10:34 pm Eastern Standard Time, with totality beginning at 11:41 pm. The total eclipse lasts for slightly over an hour, ending at 12:43 am. The eclipse finishes when the Moon fully emerges from Earth's shadow by 1:51 am. Convert these times to your own time zone to plan your own eclipse watching; for example, observers under Pacific Standard Time will see the eclipse start at 7:34 pm and end by 10:51 pm.

Lunar eclipses offer observers a unique opportunity to judge how much the Moon's glare can interfere with stargazing. On eclipse night the Moon will be in Cancer, a constellation made up of dim stars. How many stars you can see near the full Moon before or after the eclipse? How many stars can you see during the total eclipse? The difference may surprise you. During these observations, you may
spot a fuzzy cloud of stars relatively close to the Moon; this is known as the "Beehive Cluster," M44, or Praesepe. It's an open cluster of stars thought to be about 600 million year old and a little under 600 light years distant. Praesepe looks fantastic through binoculars.

Mars is visible in the evening and sets before midnight. It is still bright but has faded considerably since its closest approach to Earth last summer. Watch the red planet travel through the constellation Pisces throughout January.

Venus makes notable early morning appearances beside both Jupiter and the Moon later this month; make sure to get up about an hour before sunrise for the best views of these events. First, Venus and Jupiter approach each other during the third full week of January. Watch their conjunction on the 22 nd, when the planets appear to pass just under $21 / 2$ degrees of each other. The next week, observe Venus in a close conjunction with a crescent Moon the morning of the 31st. For many observers their closest pass - just over half a degree apart, or less than a thumb's width held at arm's length - will occur after sunrise. Since Venus and the Moon are so bright you may st1ill be able to spot them, even after sunrise. Have you ever seen Venus in the daytime?

If you have missed Saturn this winter, watch for the ringed planet's return by the end of the month, when it rises right before sunrise in Sagittarius. See if you can spot it after observing Venus' conjunctions!

You can catch up on all of NASA's current and future missions at nasa.gov

## 2018 Star Party Schedule

| January 11 | 7:00 PM |
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| February 6 | 7:00 PM |
| March 8 | 7:00 PM |
| April 5 | 8:00 PM |
| May 3 | 8:00 PM |
| June 7 | 8:30 PM |
| July 5 | 8:30 PM |
| August 2 | 8:00 PM |
| September 27 | 7:30 PM |
| October 25 | 7:00 PM |
| November 29 | 7:00 PM |
| December 27 | 7:00 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 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:

- For the foreseeable future, all indoor meetings will be held on the $3^{\text {rd }}$ Tuesday of each month in Coykendall Science BIdg., SUNY New Paltz (directions above) at 7:30 PM. All indoor events are FREE! All are welcome. The presentations are generally geared towards teenagers and up. For more information, call the Club Hotline.
- 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.

