



Mid-Hudson Astronomical Association

February, 2016

Website: www.midhudsonastro.org

Yahoo Group: MHAstro

President : Willie Yee
Secretary: Jim Rockrohr
Newsletter Editor: Rick Versace
Publicity: Paul Chauvet
Parks Liaison:

Vice President: Candace Wall
Treasurer: OPEN (Ken Bailey until June)
Membership Coordinator: OPEN
Webmaster: Paul Chauvet
College Liaison: Dr. Amy Forestell

Directors: Karl Loatman, Joe McCagne, Steve Carey, Paul Granich

Minutes of the monthly meeting of the Mid Hudson Astronomical Association,

January 19, 2016

The meeting was called to order at 7:30 PM by President Willie Yee in the Auditorium of the Coykendall Science Center at SUNY, New Paltz, NY.

The minutes were approved as published in the most recent newsletter with the following correction: clarify that Willie's request for 0.965" eyepieces were for a SUNY telescope, not Willie's personal 'scope.

Officer's Reports:

Membership: Caryn Sobel was not present. (REMINDER: Dues are due!) Ken Bailey reported that he has received many renewals and a few new memberships.

Treasurer: Ken Bailey was present, but see his latest report as published in the newsletter.

Treasurer's Report for the month of January, 2016

Date: 4 February, 2016

Bank Balance:	\$3080.50
Outstanding Checks:	\$ 681.87
Outstanding Deposits:	\$ 47.94
Ending Bank Balance:	\$2446.57
Checkbook Balance:	\$2446.57
Balance with Bank: Yes	

Ending balance total: \$2446.57

Notes: Outstanding deposits are two deposits for membership dues from PayPal. Outstanding checks are for Dutchess County Science Fair prizes, Stargazing Permit at Lake Taghkanic State Park, fee for Vendor Booth at NEAF 2016 and our insurance for 2016.

Respectfully submitted: Ken Bailey
Treasurer

Outreach: Candace Wall was present and the following were discussed:

- **High Meadows School:** Wednesday, January 20. Jack Chastain to present.
- **LX200 Training:** Jack also helping a new telescope owner with his LX200 (ongoing).
- **James Evans Elementary School** (Wappingers Falls): Looking for a brief presentation and outdoor star gazing in April/May for 6-12 year olds on a Thursday or Friday.
- **Montessori Schools** (New Paltz?): Looking for a regular (monthly?) presentation. Joe Macagne working on this.
- **Stone Ridge Public Academic Fair:** Saturday, April 2, requesting a S.T.E.A.M. Focused (Science, Technology, Engineering, Arts, and Mathematics) presentation.
- **Fishkill Plains Elementary School:** Looking for a presentation and star gazing on a Wednesday or Thursday in March, April, or May.
- **Girl Scouts Camporee at Ulster County Fairgrounds:** June 11. Looking for an activity for the girls during the day and star gazing for those who stay overnight.
- **Sam's Point:** Looking for a day time solar weekend day event in early spring. Willie working on this for April and to include a moon viewing.
- **Olana:** Current dates are April 23 and September 3 (Labor Day weekend).

Publicity: Paul Chauvet was present. Send him info on public events.

Webmaster: Paul Chauvet present. No issues known.

Upcoming programs: Candace Wall was not present but the following information was shared:

- February – Bob Berman
- March – Willie Yee on Exoplanets

- April – Tarun Biswas
- May – (TBD)
- June – Steve Bellevia

Old Business:

- **Annual dinner** is still on for January 22 at the Would Bar and Grill. Willie will make a weather call Saturday afternoon. Check email and the Yahoo list.
- **We still need a Treasurer.** Ken will be leaving sometime this summer and we need a replacement. Please consider volunteering for this position.
- **Club Telescopes:**
 - 13" Dobsonian (Jack Chastain). Mirror removed. Working on collecting more info and prices.
 - Criterion 8" SCT is available. Tabletop use (no tripod). See Willie.
 - ETX 125 has a focuser issue. Jo Macagne will fix it with a JMI remote focuser add-on.
 - 4" with Paul Chauvet.
 - 8" Newtonian on an equatorial mount with Karl Loatmann, to be transferred to Ken Bailey for delivery to his son's new astronomy club in South Carolina.

New Business:

- **Potential Grant:** Ken Bailey mentioned that his employer, Entergy, offers \$750 grants to nonprofit groups that have their employees on their board of directors. Ken is pursuing this for us before he retires.

Observing Reports:

- (None mentioned)

Visitors/New Members:

There was a total of about 40 people in attendance.

The meeting was adjourned at 7:53 PM. The next meeting is on February 17th. The program that followed was on Celestial Navigation by Dr. Ed Popko.

Submitted by James Rockrohr, February 12, 2016.

From the President:

Treasurer needed

As most of you know, Ken Bailey who has served as our treasurer the past few years will be moving to warmer climes sometime this year. We are in need of a new treasurer, and the sooner the better so that Ken can mentor the new person into the job, and arrange to have signatures transferred, etc.

Please contact Ken <fleetwizard01@yahoo.com> if you would be willing to serve the club in this capacity.



Visit spaceplace.nasa.gov to explore space and earth science!

The Closest New Stars To Earth

By Ethan Siegel

When you think about the new stars forming in the Milky Way, you probably think of the giant star-forming regions like the Orion Nebula, containing thousands of new stars with light so bright it's visible to the naked eye. At over 400 parsecs (1,300 light years) distant, it's one of the most spectacular sights in the night sky, and the vast majority of the light from galaxies originates from nebulae like this one. But its great luminosity and relative proximity makes it easy to overlook the fact that there are a slew of much closer star-forming regions than the Orion Nebula; they're just much, much fainter.

If you get a collapsing molecular cloud many hundreds of thousands (or more) times the mass of our sun, you'll get a nebula like Orion. But if your cloud is only a few thousand times the sun's mass, it's going to be much fainter. In most instances, the



clumps of matter within will grow slowly, the neutral matter will block more light than it reflects or emits, and only a tiny fraction of the stars that form—the most massive, brightest ones—will be visible at all. Between just 400 and 500 light years away are the closest such regions to Earth: the molecular clouds in the

constellations of Chamaeleon and Corona Australis. Along with the Lupus molecular clouds (about 600 light years distant), these dark, light-blocking patches are virtually unknown to most sky watchers in the northern hemisphere, as they're all southern hemisphere objects.

In visible light, these clouds appear predominantly as dark patches, obscuring and reddening the light of background stars. In the infrared, though, the gas glows brilliantly as it forms new stars inside. Combined near-infrared and visible light observations, such as those taken by the Hubble Space Telescope, can reveal the structure of the clouds as well as the young stars inside. In the Chameleon cloud, for example, there are between 200 and 300 new stars, including over 100 X-ray sources (between the Chamaeleon I and II clouds), approximately 50 T-Tauri stars and just a couple of massive, B-class stars. There's a third dark, molecular cloud (Chamaeleon III) that has not yet formed any stars at all.

While the majority of new stars form in large molecular clouds, the closest new stars form in much smaller, more abundant ones. As we reach out to the most distant quasars and galaxies in the universe, remember that there are still star-forming mysteries to be solved right here in our own backyard.

. Image credit: NASA and ESA Hubble Space Telescope. Acknowledgements: Kevin Luhman (Pennsylvania State University), and Judy Schmidt, of the Chamaeleon cloud and a newly-forming star within it—HH 909A—emitting narrow streams of gas from its poles.

2016 Star Party Schedule

Date	Time	Sunset	End Civil Twilight	Nearest New Moon
January 8th	7:30 PM	4:42 PM	5:13 PM	January 9th
February 5th	7:30 PM	5:16 PM	5:45 PM	February 8th
March 11th	7:30 PM	5:59 PM	6:26 PM	March 8th
April 8th	8:00 PM	7:30 PM	7:58 PM	April 7th
May 6th	8:30 PM	8:01 PM	8:32 PM	May 6th
June 10th	8:30 PM	8:31 PM	9:05 PM	June 4th
July 1st	8:30 PM	8:35 PM	9:09 PM	July 4th
July 29th	8:30 PM	8:17 PM	8:49 PM	August 2nd
September 2nd	8:00 PM	7:27 PM	7:56 PM	September 1st
September 30th	7:30 PM	6:38 PM	7:06 PM	September 30th
October 28th	7:30 PM	5:55 PM	6:23 PM	October 30th
November 25th	7:30 PM	4:28 PM	4:59 PM	November 29th
December 30th	7:30 PM	4:34 PM	5:06 PM	December 29th

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:

- ♦ For the foreseeable future, all indoor meetings will be held on the 3rd Tuesday of each month in Coykendall Science Bldg., 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.