



Mid-Hudson Astronomical Association

October, 2014

Website: www.midhudsonastro.org

Yahoo Group: MHAstro

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

Vice President: Joe Macagne
Treasurer: Ken Bailey
Membership Coordinator: Caryn Sobel
Webmaster: Paul Chauvet
College Liaison: Dr. Amy Forestell

Directors: Steve Carey, Dave Lindemann, Karl Loatman, & Tom Rankin

Meeting Minutes

Minutes of the monthly meeting of the Mid Hudson Astronomical Association, September 16, 2014

The meeting was called to order at 7:32 PM by President Willie Yee in the Coykendall Auditorium at SUNY, New Paltz, NY.

It was moved and seconded that the minutes of the last meeting as published in the newsletter be approved. The motion passed.

Officer's Reports:

Membership: Caryn Sobel was not present.

Treasurer: Ken Bailey not present. See his report in the newsletter.

Treasurer's Report for the month of September

Date: 19 October, 2014

Bank Balance:	\$1249.60
Outstanding Checks:	\$ 73.80
Outstanding Deposits:	\$ 0
Ending Bank Balance:	\$1175.80

Checkbook Balance:	\$1175.80
Balance with Bank: Yes	

Ending balance total:	\$1175.80
Notes: Outstanding check is a reimbursement.	

Respectfully submitted: Ken Bailey
Treasurer

Outreach: Candace Wall reported on upcoming events:

- **Olana events (Willie organizing):**
 - o Sunday, September 21, 7-9 PM "Cosmic Quest" (no weather date)
 - o Saturday, November 15 (time and program TBD)
- **Rosendale Bridge** (Tom Rankin coordinating) October 3.
- **Globe at Night:** 9/15-24. Please participate!
- **Walkway Event:** 9/26 "Starry Night" gala (Candace coordinating)
- **Saugerties High School:** 10/10 (rain date 10/17) Ken Bailey coordinating.
- **Fishkill Plains Elementary School:** 10/24. Ellie Lopatinsky coordinating.
- **Tivoli Free Library:** (Ken Bailey coordinating) December TBD

Publicity: Paul Chauvet not present.

Webmaster: Paul Chauvet not present.

Upcoming programs: Joe Macagne not present.

- We need speakers. If you have any ideas or leads, let Joe or Willie know.

Old Business:

- Club Library – Ken has the library if any paid member wants to check out a video.
- Club Inventory – Willie posted this in the Files section of the MHAstro Yahoo Group.
- Club telescopes:
 - o **13.1" Dobsonian Club Telescope:** Jack Chastain has it and will bring it to club events.
 - o **8" Dynamax SCT:** Joe Macagne has it and it is available to paid members.
 - o **6" Bausch & Lomb SCT:** Tom Crepet has it and it is available to paid members.
 - o **4" Tasco Newtonian:** Paul Chauvet has it and is using it.
 - o **8" Newtonian on EQ mount:** Karl Loatman is looking for a motor drive for it.

New Business:

- **Elections** – A review of the bylaws says that a nominating committee is to be appointed at the October meeting, nominations made at the November meeting, and the election held at the December meeting.
- Eric Myers showed his portable Solar System Model and requested help in folding and assembling the passports. Copies were handed out and the group participated with extras being taken home by some.

Visitors/New Members:

No visitors introduced themselves. There were a total of about 13 people present for the meeting.

Observing Reports:

- International Observe the Moon Night – Had a good turnout at the Smolen Observatory.

The meeting was adjourned at 8:03 PM. Next meeting is on October 21.

The program that followed was the showing of “400 Years of the Telescope”, a PBS documentary.

Submitted by James Rockrohr, October 17, 2014.

From the President:

OUR SISTER CLUBS, I: AOS

Some of us may know the Astronomical Observer's Society <http://www.aosny.org/main.html> from attending past StarFests at Stone Tavern Farm in Margaretville. I have been attending their monthly meetings for the past couple of years, while Liz has had an apartment only 10 minutes away from Hofstra University where they have their meeting.



The first big difference between our club and theirs is size: AOS has



about 300 members. Meetings are attended by 40-50 people. Their meetings are pretty long, starting at 1:15 PM on the first Sunday of the month, and going until about 4 PM. During that time there is plenty of business (even though the meeting is preceded by a board meeting), many announcements of events, awards (both from the Astronomical League, and the AOS' own observing programs), observing reports, and a review of the sky for the coming month. There is a break for refreshments and everybody gets a name tag on entering. After refreshments there is a speaker, or sometimes two, if members are reporting on short topics. In the evening Hofstra University has a public viewing night from the roof of Berliner Hall. Although I have never attended one of these, I am told that the views are impressive considering the amount of light pollution. The rooftop venue gets one above the streetlights, which makes a big difference.

AOS conducts quite a few outreach events. They have a very interesting program called Music and Astronomy Under the Stars (MAUS) for which they got a Sierra Club grant. Members set up their scopes outside of large outdoor music concerts where there are large audiences.

<http://www.hofstra.edu/music&astronomy/>

AOS has not one, but two observatories. AOS East, also known as the Susan F. Rose Observatory is located on the grounds of the Custer Institute in Southold, Long Island. <http://custerobservatory.org/index.html> They are open to the public every clear Saturday night. On almost any clear night there will be a member there using the 14" SCT or one of Custer's large dobs, up to 25".

The second observatory, AOS West is located at the Theodore Roosevelt Nature Center on Jones Beach. They have a couple dobs there, and have viewing nights that the Nature Center charges \$4 for. They also have a site available for members' viewing on Fire Island. This requires a NYS Parks Stargazing permit to use.

AOS is a member of the Astronomical League. AOS members receive the AL Newsletter, and are eligible for the AOS observing awards. <http://www.astroleague.org/observing.html> In addition, the AOS offers its own awards, many of which are based on the AL awards, but with lesser requirements, usually half as many targets, to encourage beginners to start organized observations.



Some AOS members have spoken to our club. Steve Bellavia worked on the camera for the Large Synoptic Survey Telescope, and post his own astrophotos regularly on Facebook. Jeff Norwood runs Camera Concepts, and has spoken to us on astronomical filters. I have managed to grab a couple of their outside speakers for our meetings also.

Finally, Sue must be mentioned. She has been president of AOS for more years than I can count. She has received awards from the Astronomical League and others. The AOS observatory is named after her, as is an asteroid. She is an energetic leader, always reaching out to others, and conveying her enthusiasm for the sky. I take a good bit of inspiration from her

Something different this month.

By ???



(Editors Note: I usually get a link that leads me to a word document. This month the link led me here...)

Article of the month: October 2014

Space Place in a Snap: Where Does the Sun's Energy Come From?

This month, the Space Place is doing something a little bit different for our monthly column—providing you with a beautifully informative and educational poster about the mechanics of our sun. This poster accompanies our latest "Space Place in a Snap" animation. This "Snap" series is a set of narrated videos and posters that, together, explain basic scientific concepts in a dynamic new medium. Entertaining in their own right, we also wish to bring this new resource to your attention as an educational tool. In this edition, we address the important question of why our sun is so hot.

To see the video that goes along with this poster, visit: <http://spaceplace.nasa.gov/sun-heat>.

Where does the sun's energy come from?

National Aeronautics and Space Administration



Every 1.5 millionths of a second, the sun releases more energy than all humans consume in an entire year. Its heat influences the environments of all the planets, dwarf planets, moons, asteroids, and comets in our solar system.

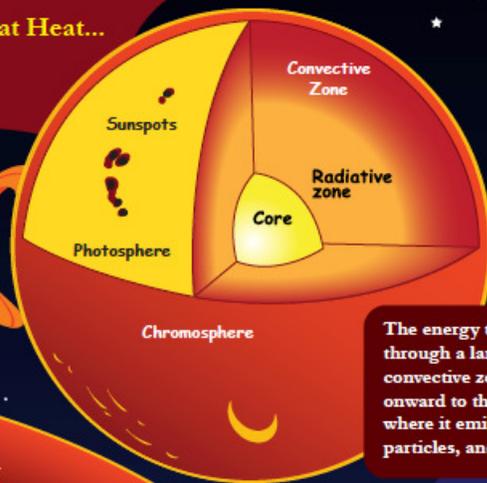
And that light travels far out into the cosmos—just one star among billions and billions.

Create a 'solar wind' that pushes against the fabric of interstellar space billions of miles away.

Allows gases and liquids to exist on many planets and moons, and causes icy comets to form fiery halos.

Powers the chemical reactions that make life possible on Earth.

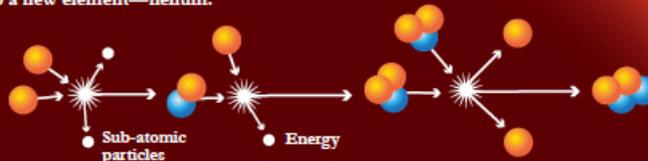
That Heat...



The energy travels outward through a large area called the convective zone. Then it travels onward to the photosphere, where it emits heat, charged particles, and light.

How does a big ball of hydrogen create all that heat? The short answer is that it is big. If it were smaller, it would be just be a sphere of hydrogen, like Jupiter. But the sun is much bigger than Jupiter. It would take 433,333 Jupiters to fill it up!

That's a lot of hydrogen. That means it's held together by a whole lot of gravity. And THAT means there is a whole lot of pressure inside of it. There is so much pressure that the hydrogen atoms collide with enough force that they literally meld into a new element—helium.



Nuclear Fusion

This process—called nuclear fusion—releases energy while creating a chain reaction that allows it to occur over and over and over again. That energy builds up. It gets as hot as 15 million degrees Fahrenheit in the sun's core.



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. Call the Club Hotline for updated information. Everyone should meet at the gate at the scheduled time. The gate will be closed after that time.
- ♦ 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.