MHAA

Mid-Hudson Astronomical Association

May, 2014

Website: www.midhudsonastro.org

Yahoo Group: MHAstro

President : Willie Yee
Vice President: Joe Macagne
Secretary: Jim Rockrohr
Treasurer: Ken Bailey
Newsletter Editor: Rick Versace
Membership Coordinator: Caryn Sobel
Publicity: Paul Chauvet
Webmaster: Paul Chauvet
Parks Liaison:
College Liaison: Dr. Amy Forestell

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

Meeting Minutes

MHAA April 15, 2014 Meeting Minutes
John R. Kirk Planetarium

7:32 meeting called to order

Check for visitors, there were a lot of college students.

There was a motion to approve last meeting's minutes. Motion approved.

Officer Reports:
Treasurer- Everything is in order

Treasurer's Report for the month of April

Date: 14 May, 2014

Bank Balance:	$2570.19
Outstanding Checks:	$ 50.00
Outstanding Deposits:	$ 50.00
Ending Bank Balance:	$2570.19
Checkbook Balance:	$2570.19

Balance with Bank: Yes

Ending balance total: $2570.19

Notes: Outstanding deposits are from memberships. Outstanding check is a donation to the SUNY New Paltz Planetarium in lieu of a speaker's honorarium.

Respectfully submitted: Ken Bailey
Treasurer

Outreach- Discussed events coming up
-Boy scout event (Eric made passports, where are we setting up?)
- Scope available to the club- Candace is taking it

Publicity- Absent

Webmaster- Absent

Vice President; Speakers – Rob Teeter next month

(All motions approved)

Old Business

Library: Needs to be made up to date

Club telescopes: Nothing with old scopes, getting 1 new one, Candace is taking it.

New Business

Raj: Astro Night Program at the Planetarium incorporating Faculty from the Music Dept. on 5/1/14

Further discussion about using the planetarium for private shows. Price is 3.50 per head.

Ideas: Paying for land to split between members to use for scope set up.

Observations:

Lunar Eclipse- A lot of attempts but no success.

7:59 Business meeting over

8:00 Willie discussed his trip to Chile using Southern Sky in Planetarium.

8:51 Meeting adjourned

This space for Lease

From the President:

Terremoto 8.2!!!

I made a major mistake in my presentation of my trip to Chile last month. My apologies. I didn't put it in my notes, and so forgot to give the details on the earthquake. So here's the story.

The evening of April 1st, 2014 was our last night in Chile. We had been blessed with 8 clear nights out of 9, and it looked to be another good one. I had over a dozen objects to complete the Astronomical League's Southern Telescopic list, and since the following night would be spent on an airplane, I planned to stay up as late as necessary to complete the list and to get one more look at the center of the Milky Way.

I had my 80 mm ED scope set up on a manual tripod. On previous nights, the 17" Dob that we rented was set up right next to me, but it had been removed, and I was pretty much alone on this observing patch.

The canopy to the right is over the swimming pool.

At 20:48 I had just set things up for observing, and was standing up when I saw a meteor overhead I gave a shout. As I went to sit down, I suddenly felt very unbalanced. I ran through my head what I was feeling, but it was not dizziness, My knees felt funny. I grabbed the tripod as I sat down and wondered it if was collapsing. The swaying feeling continued as I sat down and then I heard other people shouting, and I could feeling my self swaying back and forth about once per second. The closest sensation would be standing on a boat in heavy waves. The oscillation continued, and the water in the swimming pool started sloshing back and forth, and then started flying out over the edge of the pool. As the swaying continued for about two minutes, I started running all the lousy SyFy movies in my head, wondering if the earth was going to open up. The swaying gradually decreased in intensity, and stopped.

Everyone started walking around, checking things. There appeared to be no damage, and surprisingly, nothing fell off the shelves inside the lodge. About a foot of water had been sloshed out of the pool onto the ground nearby. The major impact at our location was the all the remotely operated telescopes would have to be re-polar aligned. We all went back to observing, all with a bit more energy than we had started the evening.

The center of the earthquake was about 300 km. from us, off the Chilean coast. Reportedly, the earth awa moving a full foot from side to side where we were in San Pedro. The major damage was in the town if Iquique. Some adobe homes collapsed, at least five lives were lost, and 300 women escaped from a prison. We were

told not to pick up any hitchhikers on our way back to the airport. There were some large power failures, and some water supplies were cut off. A six foot tsunami was generated, causing some coastal and marine damage.

Map of Northern Chile. San Pedro is about 100 km SW of Calama above the blue line near the "Chile" label.

Photos of the quake and its aftermath are here: http://www.theatlantic.com/infocus/2014/04/the-aftermath-of-chiles-earthquake/100709/

Dr. Willie K. Yee, President MHAA

MHAA at the Science Fair

Steve Carey and Lisa White volunteered as Special judges for the 2014 Dutchess County Science Fair held 3-29-2014
We actually had several students present exhibits related to the science of astronomy.
The Mid-Hudson Astronomical Association supplied several awards to each student chosen as winners
Each student received a pair of binoculars, 1 year complimentary membership in our club, a club t--shirt, and many astronomy magazines and pamphlets.

Our 2 1st place winners are:

Babu Shreyas from Van Wyck Junior High for his exhibit titled " Biomass Production System in Space.
I think it was a spin off last years exhibit, improved and better. (he won last year also)

"William Farrell from St. Marys in Fishkill titled :Why is Mars Red"
He did a good job of soil analyses, bacteria and various factors.

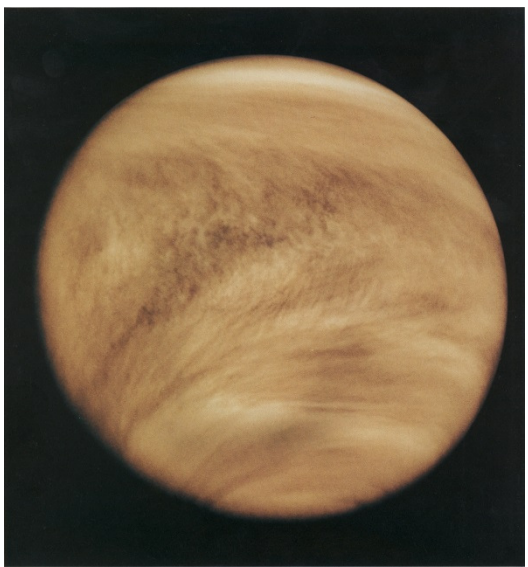
Both students are 6th grade. Job well done guys!

Steve Carey
Lisa White

The Hottest Planet in the Solar System

By Dr. Ethan Siegel

When you think about the four rocky planets in our Solar System—Mercury, Venus, Earth and Mars—you probably think about them in that exact order: sorted by their distance from the Sun. It wouldn't surprise you all that much to learn that the surface of Mercury reaches daytime temperatures of up to 800 °F (430 °C), while the surface of Mars never gets hotter than 70 °F (20 °C) during summer at the equator. On both of these worlds, however, temperatures plummet rapidly during the night; Mercury reaches lows of -280 °F (-173 °C) while Mars, despite having a day comparable to Earth's in length, will have a summer's night at the equator freeze to temperatures of -100 °F (-73 °C).



Those temperature extremes fro m day-to-night don't happen so severely here on Earth, thanks to our atmosphere that's some 140 times thicker than

that of Mars. Our average surface temperature is 57 °F (14 °C), and day-to-night temperature swings are only tens of degrees. But if our world were completely airless, like Mercury, we'd have day-to-night temperature swings that were *hundreds* of degrees. Additionally, our average surface temperature would be significantly colder, at around 0 °F (-18 °C), as our atmosphere functions like a blanket: trapping a portion of the heat radiated by our planet and making the entire atmosphere more uniform in temperature.

But it's the *second* planet from the Sun -- Venus -- that puts the rest of the rocky planets' atmospheres to shame. With an atmosphere **93 times as thick as Earth's**, made up almost entirely of carbon dioxide, Venus is the ultimate planetary greenhouse, letting sunlight in but hanging onto that heat with incredible effectiveness. Despite being nearly twice as far away from the Sun as Mercury, and hence only receiving 29% the sunlight-per-unit-area, the surface of Venus is a toasty 864 °F (462 °C), with *no difference* between day-and-night temperatures! Even though Venus takes hundreds of Earth days to rotate, its winds circumnavigate the entire planet every four days (with speeds of 220 mph / 360 kph), making day-and-night temperature differences irrelevant.

Catch the hottest planet in our Solar System all spring-and-summer long in the pre-dawn skies, as it waxes towards its full phase, moving away from the Earth and towards the opposite side of the Sun, which it will finally slip behind in November. A little atmospheric greenhouse effect seems to be exactly what we need here on Earth, but as much as Venus? No thanks!

Check out these "10 Need-to-Know Things About Venus":
http://solarsystem.nasa.gov/planets/profile.cfm?Object=Venus.

Kids can learn more about the crazy weather on Venus and other places in the Solar System at NASA's Space Place:
http://spaceplace.nasa.gov/planet-weather.

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 log, 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 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.