



Mid-Hudson Astronomical Association

August, 2013

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: Sean Dague
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, July 16, 2013

The meeting was called to order at 7:34 PM by President Willie Yee in the auditorium of the Coykendall Science Building at SUNY, New Paltz, NY.

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

Officer's Reports:

Membership:

Caryn Sobel reported that current membership is 60 paid, 4 life members, 9 advocate members, and 1 guest.

Treasurer:

Ken Bailey gave his report. The current balance is \$2619.38.

Treasurer's Report for the month of July

Date: 17 August, 2013

Bank Balance:	\$2481.81
Outstanding Checks:	\$ 100.00
Outstanding Deposits:	\$ 100.00
Ending Bank Balance:	\$2481.81

Checkbook Balance:	\$2481.81
Balance with Bank: Yes	

Outstanding deposits since end of month: \$100.00
Ending balance total: \$2481.81
Notes: None.

Respectfully submitted: Ken Bailey
Treasurer

Outreach: Candace Wall

Upcoming events include:

There will be an MHAA presence at the Grey Fox music festival again this year, July 18-21. Paul Granich reported that he is getting plenty of help and all is going well. Watch Yahoo and MeetUp for details.

Candace mentioned that there has been a request from the Center for Discovery in Harris, NY, for a presentation from us on July 24 from 12:30 to 2 PM. Willie will be there with his solar scopes and is looking for 1-2 more people to help

Walkway Over the Hudson is looking for us to provide scopes for their "Moonwalk" on July 22nd. Contact Willie for more details.

Publicity:

Paul Chauvet is looking for input on future events to publicize.

Webmaster:

Sean Dague was not present.

Upcoming programs:

Paul Chauvet will present a talk on string theory at the August meeting.

Old Business:

12" Club Telescope:

Karl Loatman has possession of the 12" (13"?) dobsonian. He reports that it looks salvageable.

Other Club telescopes:

Paul Chavet has the 4" and is using it. There is a 10" home built Dobsonian available to be donated to the club if the club is interested.

Walkway Solar System Model:

Willie Yee reports that he is shooting to have a version ready for the October walkway event.

New Business:

A picture gift will be presented to Dave Rossetter before he moves in recognition of his many years of service to the club. Ken has purchased an additional 24 tee shirts. See him if you want any of them.

Visitors/New Members:

1 visitor introduced themselves. There was a total of about 17 people present for the meeting.

The meeting was adjourned at 7:50 PM.

The program that followed was a talk by Chris Kendall on his recent trips to Antarctica.

Submitted by James Rockrohr, August 18, 2013.

From the President:

A couple years ago a two of our members were attending The Grey Fox Bluegrass Music Festival. They looked into the night sky and thought that this would be a great place to do some viewing. The following year they attended, and worked out a site for public viewing with the organizers. Everyone had a good enough experience that they wanted to do it again.

This year, MHAA was able to do it again, and learning from the previous year's experience, were able to do a much better job. A better site was obtained, we were given a page on their website, space in the printed program, and announcements from the main stage.

Paul Granich and Rick Versace did yeoman work, getting there two days early to set up six different tents and canopies to house ourselves, equipment, and the information table. We had acquired an abundance of material to give away from NASA, the Night Sky Network, the Charlie Bates Solar Astronomy Outreach Project, and some of our own members.

Whether or not you are a fan of bluegrass music, this is a fun event to come to. Regardless of your musical orientation, you will be doing a lot of toe tapping. In addition to the main stage, there are 4 or 5 smaller stages for different types of talent, and one with a large dance floor. Walking around the camping area, one hears music being made by small groups of folks, either impromptu or groups or families making their own music. There is quite a good selection of quality vendors, and at least three different places to get decent espresso.

Paul and Rick, were joined for part of the time by myself, Scott Ewart, Dave Rossetter and Fritz the Wonder Scope. Bill Walsh, Chuck Clark and Candace Wall were able to stop by for visits. We reached at least 100 people during the day of solar viewing, and 200 in the evening. Much of the time the weather was cloudy, and there was a significant moon that limited the number of targets, but on the clear night the viewing was quite good. Overall it represented the rarest of outreach opportunities: big crowds AND dark skies. And a lot of banjo pickin' to boot.

MHAA @ Grey Fox 2013



A Final Letter from David Rossetter

My Dear Friends at the Mid-Hudson Astronomical Association,

This note is a “good-bye” of sorts. You have all been a huge part of the past fifteen or so years of my life. It was the mid-90’s when I was blown away by two awesome comets in the night sky. It seemed a good time to renew my interest in astronomy and I purchased a series of inexpensive (read “cheap”) scopes and a decent pair of binoculars. I stumbled through the sky on my own for about a year when I stumbled on Tom Crepet walking down my road one afternoon. We talked about birding (which he was doing at the time) and I mentioned the skies were pretty dark in my area and professed my growing interest in watching the sky. Amazingly enough, Tom admitted to teaching astronomy at the college and to being the treasurer at the local astronomy club. I attended my first MHAA meeting the following week and never looked back...just up.

I keep reliving some of my happiest times with all of you. Dark (then) nights at Wilcox Park, great speakers at the indoor meetings, classes with Bob Berman up at his home near Woodstock, outreach events where I learned to speak to the public, getting roped into the Treasurer’s position for several years (thanks, Tom!), then President and Vice President (where I got to coordinate speakers and meet some fascinating folks), hosting John Dobson in my home during his visit to us, incredible trips to star parties in the Catskills, Adirondacks, and Florida Keys, many deep conversations with dear friends under dark skies and teaching an astronomy class for the New Paltz Lifetime Learning Institute for three years. Many hours watching Chuck Clark under my 25” dob, “Fritz”, while fixing one of its many problems. Maureen was usually there waiting her turn for him to work on her scope. I learned by watching Bill Walsh give sky tours at public events. We mixed interests hanging out with Paul G. at bluegrass festivals. These are the kind of folks our club is full of - so generous with their time, talent, and knowledge.

I bought some land and built a house geared toward observing. Unfortunately, the observatory that was supposed to go with the house never did get built. I ran into some difficult personal problems that ended in a divorce after 32 years. It was time to step back from astronomy and the club for a couple of years while I recovered. So many of you were incredibly supportive during this time that I was really touched. Thank you.

As my next step of healing from the pain of the past few years, I have decided to move to Charlottesville, Virginia. My mother, sister and brother-in-law live down there. It will be good to be with family, again. I am starting a new life with a beautiful woman. She is a scientist and enjoys astronomy. The Charlottesville Astronomical Society (<http://cvilleastro.com>) is a very active club in the area. It will be fun getting to know them. I plan to continue trips to star parties including the 2014 Winter Star Party. Pam is very excited to go with me. In addition, I will continue my airline flying career and hope to be based out of Washington Dulles, soon.

We can keep in touch as I plan to continue as a member of the MHAA. I hope to see you at some star parties (Mason Dixon?, Adirondack Astronomy Retreat, and WSP). If you want to contact me or get more details of my new situation, please email me at drossetter@yahoo.com. I would love to hear more of what all of you are doing. And I’ll keep active on the club’s Yahoo Forum.

What an amazing experience under the stars the past fifteen years have been. I’m thrilled to know the club is doing so well and is such good hands. Thank you for being such a big part of my life.

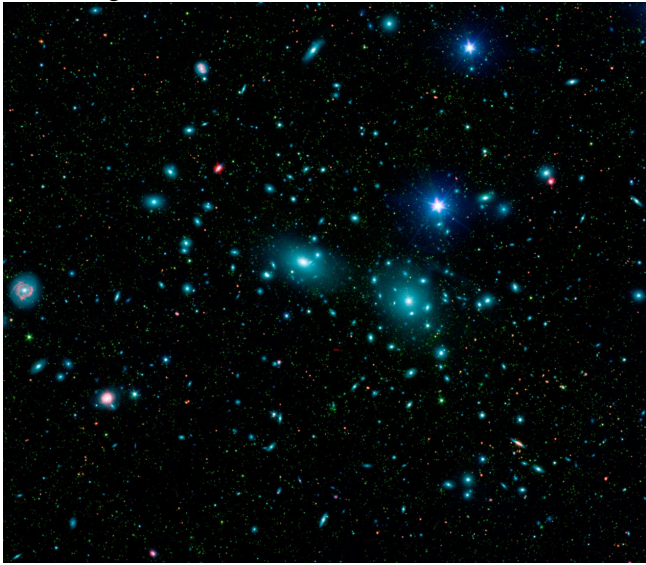
David Rossetter

Size Does Matter, But So Does Dark Energy

By Dr. Ethan Siegel

Here in our own galactic backyard, the Milky Way contains some 200-400 billion stars, and that's not even the biggest galaxy in our own local group. Andromeda (M31) is even bigger and more massive than we are, made up of around a *trillion* stars! When you throw in the Triangulum Galaxy (M33), the Large and Small Magellanic Clouds, and the dozens of dwarf galaxies and hundreds of globular clusters gravitationally bound to us and our nearest neighbors, our local group sure does seem impressive.

Yet that's just chicken feed compared to the largest structures in the universe. Giant clusters and superclusters of galaxies, containing thousands of times the mass of our entire local group, can be found omnidirectionally with telescope surveys.



Perhaps the two most famous examples are the nearby Virgo Cluster and the somewhat more distant Coma Supercluster, the latter containing more than 3,000 galaxies. There are millions of giant clusters like this in our observable universe, and the gravitational forces at play are absolutely tremendous: there are literally *quadrillions* of times the mass of our Sun in these systems.

The largest superclusters line up along filaments, forming a great cosmic web of structure with huge intergalactic voids in between the galaxy-rich regions. These galaxy filaments span anywhere from hundreds of millions of light-years all the way up to more than a *billion* light years in length. The CfA2 Great Wall, the Sloan Great Wall, and most recently, the Huge-LQG (Large Quasar Group) are the largest known ones, with the Huge-LQG -- a group of at least 73 quasars -- apparently stretching nearly 4 billion light years in its longest direction: more than 5% of the observable universe! With more mass than a million Milky Way galaxies in there, this structure is a puzzle for cosmology.

You see, with the normal matter, dark matter, and dark energy in our universe, there's an upper limit to the size of gravitationally bound filaments that should form. The Huge-LQG, if real, is more than *double* the size of that largest predicted structure, and this could cast doubts on the core principle of cosmology: that on the largest scales, the universe is roughly uniform everywhere. But this might not pose a problem at all, thanks to an unlikely culprit: **dark energy**. Just as the local group is part of the Virgo Supercluster but recedes from it, and the Leo Cluster -- a large member of the Coma Supercluster -- is accelerating away from Coma, it's conceivable that the Huge-LQG isn't a single, bound structure at all, but will eventually be driven apart by dark energy. Either way, we're just a tiny drop in the vast cosmic ocean, on the outskirts of its rich, yet barely fathomable depths.

Learn about the many ways in which NASA strives to uncover the mysteries of the universe:

<http://science.nasa.gov/astrophysics/>. Kids can make their own clusters of galaxies by checking out The Space Place's fun galactic mobile activity: <http://spaceplace.nasa.gov/galactic-mobile/>

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.