



March, 2016

March 18th: Membership Meeting at Retzer Nature Center

The upcoming General Membership Meeting of the MAS is going to be held on March 18th, at 8:00 PM at the Retzer Nature Center, which is located at S14 W28167 Madison St. Waukesha, WI 53188 (see the map below).

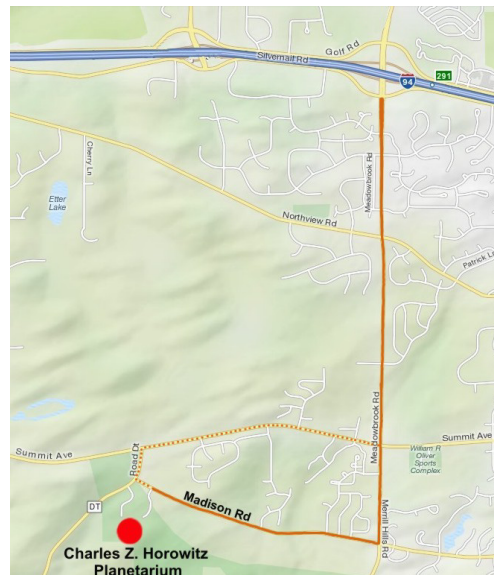
The speaker of the night will be Paul Borchardt. In his talk: **"Haleakala: Surf to Sunset"** Paul will tell a story of going from the base of the Maui mountain Haleakala to the top and taking astrophotos on the summit. The slideshow will include images of changing vegetation, views from the mountain, as well as several breathtaking astrophotos. One of those is a scan of the NGC 3372 The Eta Carinae Nebula shot with a 200 mm lens, 30 min exposure on ISO 100 color slide film.



NGC 3372 The Eta Crinae Nebula

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The MAS Winter Schedule

The winter meetings from January through April will be held in the lecture room of the Retzer Nature Center, S14 W28167 Madison St in Waukesha. Starting from May the meetings will return to the MAS Observatory.

Directions to Charles Z. Horowitz Planetarium: take I-94 West to Pewaukee/Waukesha (exit 291) and go south on Meadowbrook Rd. Turn right onto Madison Rd. The driveway to the planetarium will be on the left side of the road (see solid line on the map). Alternatively, turn right onto Hwy. 18 (Summit Ave), turn left onto Hwy DT and follow the signs to Retzer Nature Center (dotted line on the map).

Observatory Report

It has been a particularly cloudy winter so there has been little activity at the Observatory. I changed the combination on the pad lock on the gate and continued thanks to the plowing by Paul Borchardt.

With the Board approval of the new solar observatory, the observatory staff had a meeting at the observatory to hammer out details as to the exact placement and what secondary scope we'll mount with the main Lunt telescope. Both the telescope and the observatory have been ordered.

Website: With all the activity at the observatory I've had real difficulty in keeping the website and the manuals up to date. There's the observatory section on the website, and the Observatory Manual and the Member Guide. I've done as much as I can given the weather, but I need additional pictures to complete the process which I want to do as soon as the snow is gone. One challenge has been to update the satellite/aerial pictures which I've attempted by "photoshopping" the recent changes.

I've also put a whole section together for the history of the MAS as I had various requests after my presentation. There are 8 sections and like that presentation, it goes through 1977. It can be found in the History tab.

Respectfully Submitted,
Gene Hanson, Observatory Director

Treasurer's Report

\$1,459.71	Ending Balance as of 1/13/2016
	<u>Expenditures</u>
\$124.14	WE Energies
\$6.94	PayPal Fees
\$10.00	Filing fee - Wisc 5
-141.08	TOTAL Expenditures
	<u>Revenue</u>
\$66.59	Calendar Sales
\$244.00	Membership Dues
\$310.59	TOTAL Revenue
\$1,629.22	Ending Balance as of 1/16/2016

Respectfully Submitted,
Sue Timlin, Treasurer

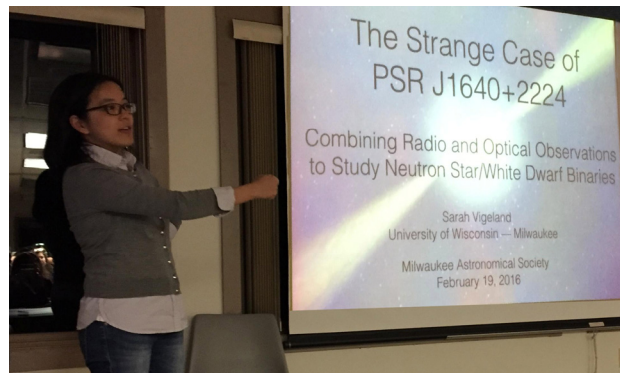
Meeting Minutes

Held on February 19th at the Retzer Nature Center, Waukesha. The meeting was called to order at 8:06 PM by President, Tamas Kriska.

Minutes of the previous meeting, **Treasurer's Report**, **Observatory Director's Report**, and the **Membership Report** were submitted electronically in advance and were not read.

Old Business - A Honorary Member Certificate has been sent to Virgil Tangney. Solar POD and telescope were ordered. The days and topics have been determined for Public Nights and will be posted on the Google group. The Board is looking for speakers. Volunteers are asked to contact Sue Timlin. The Board voted to give authority to the Observatory Committee to sell used equipment to offset the expenses of the Quonset remodeling.

The Program - Sarah Vigeland, from UWM gave a talk entitled: The Strange Case of PSR J1640+224 - Combining Radio and Optical Observations to Study Pulsar/White Dwarf Binaries.



The meeting was adjourned at 8:55 PM.

Respectfully Submitted,
Agnes Keszler, Secretary

Membership Report

Since the February Report we received 5 new membership applications and would like to welcome Jack Alloy & Family, Paul Stillmank & Family, Janice Edwards, Curtis Nunn & Family, and Randall DiGiuseppe. One application is still pending. We now have 97 active members.

Respectfully Submitted,
Jeff Kraehnke, Committee Chair

Observatory News

Planetary Imaging Workshop

In order to help new members familiarize themselves on the use of the Club's equipment, Lee Keith proposed a series of imaging workshops. Many members who are eager to learn immediately responded to this initiative. Lee offered to start with his field of expertise: planetary imaging.

To date Lee already held two sessions: one on Saturday February 27th and another one on Wednesday March 9th. In the introductory lecture he walked the attendants through the background of planetary imaging, the tools (telescope, camera) he and the Club uses, and the image processing and post processing methods. Then he demonstrated all steps using the MAS' equipment. A and B scope, and also the 12" LX 200 telescope are suitable for taking videos with our Skyris 618 (both color and monochrome) cameras. The cameras can be connected to the Club's laptop where all necessary

software are installed including the processing ones.

For those who are interested but could not attend the previous two sessions: **The final session will take place on Saturday April 2nd**. Interested people should notify Lee about their intent to attend via the Google Group.

The next series of imaging workshop will be about deep sky object, time and presenter TBD. Stay tuned!



Virgil Tangney's Honorary Membership

In the February issue we published an article about awarding a Honorary Membership to Virgil Tangney. Tom Schmidtkunz would like to tell MAS members a bit more about Virgil:

I started with MAS as a very young man back in the 1960's. Virgil, with his wife and family, started a short time after. We worked together on "Open Houses" that MAS had throughout the summer. We would take turns on A or B scope, and show the public the wonders of M11, M13, Albireo, and etc. This was a great opportunity for me to learn a great deal, and to experience the excitement other members had for Astronomy.

Back then, of course, the sky was quite good. By the time M13 was half way up in the east, it was in a fairly dark sky. Virgil was of great benefit to the society over many

decades. We worked tirelessly on construction, observing projects, maintenance, public programs, and, on the board. He had a keen insight into construction issues. He and Gerry Samolyk worked out a lot of the technical challenges MAS faced as it re-entered it's building phase.

I can recall several lunar occultations I was on with Virgil. It was remarkable technology for its day. It was said that because of the very accurate measurements we got of the moon, we actually knew some parts of lunar geography better than those of earth.

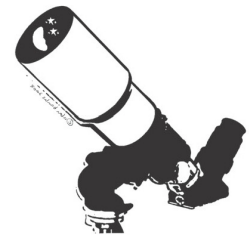
Did you ever hear that old saying: If we have done great things, it is because we have stood on the shoulders of giants? Well, in my view, Virgil is one of the giants of the MAS.

Tom Schmidtkunz

Astronomical Events



9th Annual Swap 'N' Sell



Sponsored by Sheboygan Astronomical Society
 Saturday, April 9, 2016
 Aviation Heritage Center
 Sheboygan Airport
 N6191 Resource Drive, Sheboygan Falls, WI 53085
 9:00 am to 2:00 pm

Now is the time to mark your calendars and spread the word about our 9th annual Swap-n-Sell event. Got some astronomical stuff (scopes, eyepieces, books, etc.) laying around and you want to get rid of it?

Here's your chance! Bring unwanted astronomy items to sell or swap with other amateur astronomers!

This is a great opportunity to meet and greet fellow amateur astronomers.

Event Highlights:

Astronomy Trivia, 10:00 am

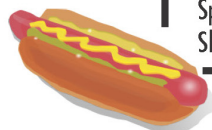
Guest Speaker: Michael Bakich, Editor, Astronomy Magazine:

"The Dark Side of Science: The 2017 Total Solar Eclipse", 11:00 am

Redbird Motion Plus Visual Simulator: Your chance to fly a 3-axis full-motion flight simulator. \$10.00 (cash) for a 15 minute flight. Sign up by emailing dvanminsel1@gmail.com

Events will be held in the Aviation Heritage Museum room.

Brat Fry will be held during the event
 Sponsored by Sheboygan Astronomical Society



Terms are cash, check or swap.

The Sheboygan Astronomical Society is not responsible or will not be held liable for any dealings which do or do not occur.

In the Astronomical News

What if Extraterrestrial Observers Called, but Nobody Heard?

As scientists step up their search for other life in the universe, two astrophysicists are proposing a way to make sure we don't miss the signal if extraterrestrial observers try to contact us first.

René Heller and Ralph Pudritz say the best chance for us finding a signal from beyond is to presume that extraterrestrial observers are using the same methods to search for us that we are using to search for life beyond Earth. Here on Earth, space researchers are focusing most of their search efforts on planets and moons that are too far away to see directly.

Instead, they study them by tracking their shadows as they pass in front of their own host stars.

Measuring the dimming of starlight as a planet crosses the face of its star during orbit, scientists can collect a wealth of information, even without ever seeing those worlds directly. Using methods that allow them to estimate the average stellar illumination and temperatures on their surfaces, scientists have already identified dozens of locations where life could potentially exist.

In a paper to be published in the journal *Astrobiology*, and available now online, Heller and Pudritz turn the telescope around to ask, what if extraterrestrial observers discover the Earth as it transits the sun? If such observers are using the same search methods that scientists are using on Earth,

the researchers propose that humanity should turn its collective ear to Earth's "transit zone", the thin slice of space from which our planet's passage in front of the sun can be detected.

It is impossible to predict whether extraterrestrials use the same observational techniques as we do, says Heller. "But they will have to deal with the same physical principles as we do, and

Earth's solar transits are an obvious method to detect us. The transit zone is rich in host stars for planetary systems, offering approximately 100,000 potential targets, each potentially orbited by habitable planets

and moons, the scientists say - and that's just the number we can see with today's radio telescope technologies.

If any of these planets host intelligent observers, they could have identified Earth as a habitable, even as a living world long ago and we could be receiving their broadcasts today.

Heller is a post-doctoral fellow who, while at McMaster, worked with Pudritz, a professor of Physics and Astronomy. Heller is now at the Institute for Astrophysics in Göttingen, Germany.

The question of contact with others beyond Earth is hardly hypothetical, as several projects are under way, both to send signals from Earth and to search for signals that have been sent directly or have "leaked" around obstacles, possibly travelling for thousands of years.

by Phys.org



Adopt a Telescope Program - Signup Sheet

	Adoptee	Scope	Location
1	Sue Timlin	18" F/4.5 Obsession	Wiesen Observatory
2	Neil Simmons	12.5" F/7.4 Buckstaff	B Dome
3	Russell Chabot	12.5" F/9 Halbach	A Dome (Armfield)
4	Dan Yanko	18" F/4.5 Obsession (Kyle Baron)	Albrecht Observatory
5	Tamas Kriska	14" F/7.4 G-scope	Z Dome
6	Henry Gerner	12" F/10 LX200 EMC	Tangney Observatory
7	Vacant	8" F/11 Celestron EdgeHD	Ray Zit Observatory
8	Vacant	14" F/1.9 F-scope	Jim Toeller Observatory

At Your Service

Officers / Staff

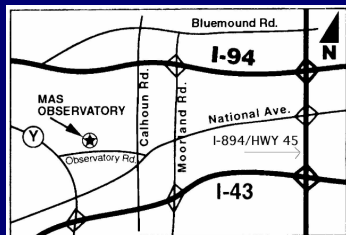
President	Tamas Kriska	414-581-3623
Vice President	Sue Timlin	414-460-4886
Treasurer	Sue Timlin	414-460-4886
Secretary	Agnes Keszler	414-581-7031
Observatory Director	Gene Hanson	262-269-9576
Asst. Observatory Director	Jill Roberts	414-587-9422
Asst. Observatory Director	Jeff Kraehnke	414-333-4656
Newsletter Editor	Tamas Kriska	414-581-3623
Webmaster	Robert Burgess	920-559-7472

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John Hammetter	414-519-1958
Gene Hanson	262-269-9576
Lee Keith	414-425-2331
Frank Kenney	414-510-3507
Jeff Kraehnke	414-333-4656
Agnes Keszler	414-581-7031
Tamas Kriska	414-581-3623
Sue Timlin	414-460-4886

March/April Keyholders

3/19	Jeff Kraehnke	414-333-4656
3/26	Mike Smiley	262-825-3981
4/2	Tom Schmidtkunz	414-352-1674
4/9	Dan Yanko	262-255-3482
4/16	Russell Chabot	414-881-3822
4/23	Brian Ganiere	414-961-8745
4/30	Scott Berg	262-893-7268



MAS Observatory

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www.milwaukeeastro.org