



April, 2020

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May Meetings

As the COVID-19 pandemic continues and the safer at home order is still in effect the next **Board Meeting** again will be held through Zoom videoconference on Friday, May 15th, from 7 PM. If you are not a Board member but would like to attend please contact Tamas Kriska. The **Business/Election Meeting** will be held afterwards from 8 PM also through Zoom. Invitation will be distributed thru Google Group.

We will begin the Business Meeting by electing new Board Members. The second term of one and the first term of three Board members will be expired. Then the newly elected Board will vote for Officers.

If you are interested in serving a three year term on the Board of Directors, a year as an Officer (President, Vice President, Treasurer, Secretary), or would like to receive more information about those positions, please contact any Board Member or Officer.

The election will be followed by a presentation by MAS member **Gabe Shaughnessy** entitled "**The Art and Science of Nebulae**".

The **PixInsight Focus Group** will meet on Wednesday, May 13th at 7 PM. The specific topic of the meeting will be announced on the Google Group.

To protect the health and safety of our members all activities at the Observatory are suspended until the CDC guidelines change. Therefore, the Saturday Member Nights and in person Meetings are cancelled. However, the **First Wednesday How to Meeting** will be held through Zoom videoconference on May 6th, from 7 PM.

The MAS Google Group is as active as ever. Learn about the astronomical news, follow equipment related discussions, or just check out the latest images taken by fellow Club members.



Public Nights

The May and June open houses of the 2020 season have been cancelled due to the current social distancing requirements. For later dates decisions will be made based on possible changes in CDC and State guidelines. Please check the MAS website for up to date information.

Observatory Director Report

I think we know all why there's not a lot to talk about this month. The one thing I will mention is that even though member's night has been postponed the keyholders have been asked to come on their regularly scheduled Saturdays at any time during the day to check on the Observatory and the grounds.

The contractor who is going to pour the new steps into A-building let me know that he will be able to do the work during the second half of May. So, we need to remove the old steps before then. This is going to require the use of a jack hammer; I will investigate the cost of renting one. Thank you to Steve Volp for acquiring disinfectant materials. Contacts on the F-scope's guide camera had to be adjusted again. Sue purchased a Burning Permit.

Respectfully Submitted,
Paul Borchardt, Observatory Director

Treasurer's Report

\$11,090.51	Starting Balance as of 03/18/2020
	<u>Expenditures</u>
\$5.57	PayPal fees
\$128.00	Website/Burn permit
\$36.00	Water/Sewer
\$122.71	WE Energies
\$292.28	TOTAL Expenditures
	<u>Revenue</u>
\$120.00	Private donations
\$244.00	Membership dues
\$3.00	Grants
\$367.00	TOTAL Revenue
\$11,165.23	Ending Balance as of 04/15/2020

Respectfully Submitted,
Sue Timlin, Treasurer

Membership Report

Since the last Report we received 3 new applications. We welcome Austin Grey, Ronald Gilbert, and Benjamin & Nicole King Family. The total number of active members is 165.

Respectfully Submitted,
Jeff Kraehnke, Committee Chair

Minutes

Due to the COVID-19 outbreak the meeting was held on April 17th via Zoom videoconference. The meeting was called to order at 7:06 PM by Tamas Kriska President. The following Board Members were present: Jim Bakic, Scott Berg, Russ Blankenburg, Clark Brizendine, Jason Doyle, John Hammetter, Jeff Kraehnke, Gabe Shaughnessy, Sue Timlin, Steve Volp, Mike Wagner, and Agnes Keszler. Gene Hanson (FM), Mike Bauer, Jill Roberts, and Dennis Roscoe were also present.

Minutes, Treasurer's Report, Observatory Director's Report, and Membership Committee Report electronically submitted ahead of the meeting were approved (with amendment to the Observatory Director's Report: Thank you to Steve Volp for acquiring disinfectant materials. Contacts on the F-scope's guide camera had to be adjusted again. Sue purchased a Burning Permit). Membership applications of Lora Blasius, Christine Pilacek, Austin Frey, Ronald Gilbert, and Benjamin King & Family were approved.

Old Business – Entrance gate: Still looking at possibilities. Public Nights: The May Public Nights were cancelled. We are looking to Face Book live presentations as alternatives for future events. Dennis Roscoe volunteered to organize presentations via his Zoom business account. Observatory use: Member's Nights are cancelled, keyholders still can go out with proper protection. Equipment and contacted surfaces should be disinfected after use. The keyholders' duty is to check the property, clean Quonset and bathrooms, and disinfect frequently used surfaces.

New Business – Google Group: The Board discussed possibilities to organize the Google Group better. Suggested options: a) Starting a new group for more advanced, technical issues, and keeping access to both, so members can choose according to their preferences. b) Revise the moderation policy. c) No change. The discussion will be continued.

Election: The May General Meeting will be a Business Meeting to elect Board Members and Officers. Expiring Board of Directors terms: John Hammetter, 2nd, Scott Berg, Clark Brizendine, Jason Doyle 1st. Given the circumstances, the election will be held via Zoom videoconference.

Announcement – The next meeting will be on Friday, May 15th, 2020 via Zoom videoconference. The meeting was adjourned at 8:00 PM.

Membership Meeting Program: A discussion about basics of telescope, and a general guide how to choose a telescope for visual observation, or for astrophotography.

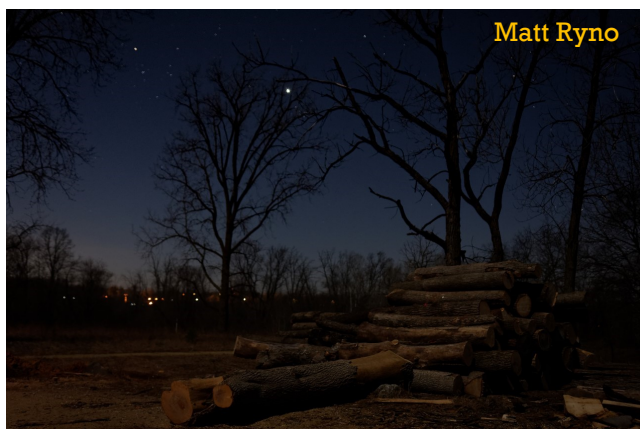
Respectfully Submitted,
Agnes Keszler, Secretary

Member's Story

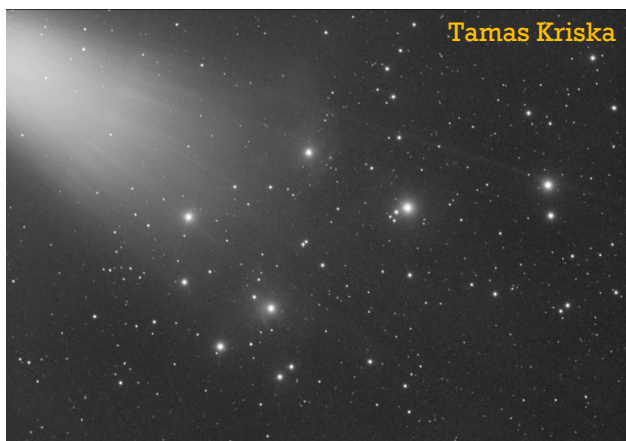
Venus-Pleiades Conjunction

Venus and Pleiades have come together in a dramatic conjunction that occurs just once every eight years. Because Venus orbits the sun 13 times in about the same time period that Earth orbits the sun 8 times, we find similar Venus-Pleiades conjunctions taking place on or near the same date every 8 years. The conjunction peaked on Friday evening of April 3, when Venus and

the Pleiades star Alcyone was separated by a mere 0.25 degrees. The sky was cloudy on April 3, however, the day before and after was clear and several MAS member imaged the event.



Matt Ryno



Tamas Kriska



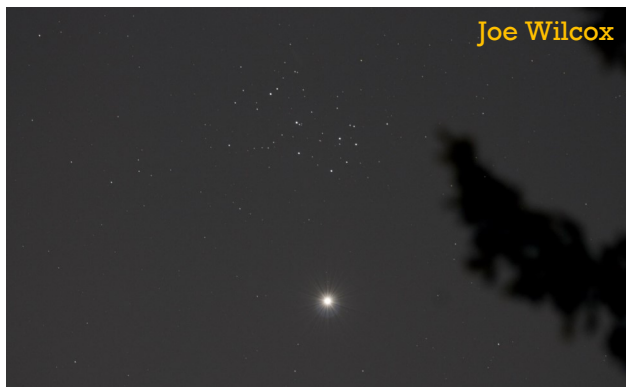
Tom Schmidtkunz



Nolan Zadra



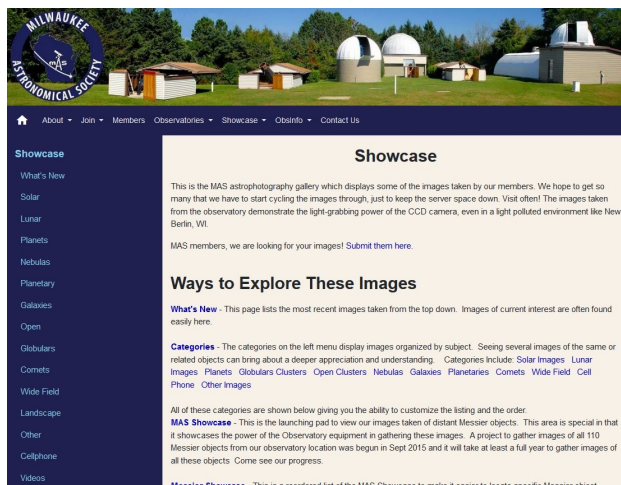
Chad Andrist



Joe Wilcox

Website Update

A New Showcase Layout



I completed a large update to the MAS website recently, although most will not notice any difference. That doesn't mean, however, it wasn't worthwhile. The changes have many benefits. It will allow better navigation (you can get directly to any part of the website from any page), more flexibility on forms, and thumbnail / gallery rendering. The last one is probably the most significant because we have a lot of images available on our site and their display is paramount.

What's New in the Showcase

Here are the newest images that have been posted to the Showcase galleries that have been added to the database.



The Showcase is an important and big part of our website. We now have nearly 1000 images in our database and we hope it can grow a lot more. Though I instituted that database a few years ago to allow for searches, the basic layout of images and how they're displayed had not changed since the whole site was updated over 10 years ago, before I took over. With this update I now have gained new tools to make a new layout with the features I desired.

When you go to any of the links or do a custom search, you now get a page of thumbnails. And when you hover over the individual images you'll see the image title and the imager. Clicking/tapping on the thumbnail brings up a page that looks like this:

Triangulum galaxy - M33

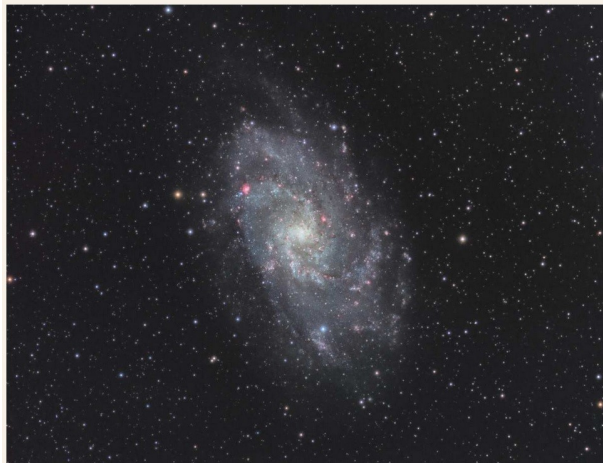


Photo by [Tamas Kriska](#)

Scope / Lens

Fscope - Stellarvue SVQ100 F5.8

Camera

ZWO ASI 1600 Pro MM

Exposure

20x3min of each RGB

6x10min Ha

Total: 4.7 hours.

Secondary Object

NGC 604 - Emission

Date

11-12/2019

ID: 965

[Other Images by: Tamas Kriska](#)

You should notice there are two links on this particular page. The first one is present when an imager has an external link. It can be their personal website, photo site, or in most instances it's their Astrobin page. The second link is always there. It is a link to show all of this MAS imagers pictures.

Further changes planned will be the data entry of the Showcase images which has gotten more challenging as the number of images posted on the Google Group and Astrobin have accelerated. It was only two years ago the image database contained 500 images. So in two years that number has doubled.

Gene Hanson
Webmaster

In the Astronomical News

Hubble Observes Aftermath of Massive Collision

What astronomers thought was a planet beyond our solar system has now seemingly vanished from sight. Astronomers now suggest that a full-grown planet never existed in the first place. The Hubble Space Telescope had instead observed an expanding cloud of very fine dust particles caused by a titanic collision between two icy asteroid-sized bodies orbiting the bright star Fomalhaut, about 25 light-years from Earth.

"The Fomalhaut system is the ultimate test lab for all of our ideas about how exoplanets and star systems evolve," said George Rieke of the University of Arizona's Steward Observatory. "We do have evidence of such collisions in other systems, but none of this magnitude has ever been observed. This is a blueprint for how planets destroy each other."

The object was previously believed to be a planet, called Fomalhaut b, and was first announced in 2008 based on data taken in 2004 and 2006. It was clearly visible in several years of Hubble observations that revealed it as a moving dot. Unlike other directly imaged exoplanets, nagging puzzles arose early on.

The object was unusually bright in visible light but did not have any detectable infrared heat signature. Astronomers proposed that the added brightness came from a huge shell or ring of dust encircling the object that may have been collision-related. Also, early Hubble observations suggested the object might not be following an elliptical orbit, as planets usually do.

"These collisions are exceedingly rare and so this is a big deal that we actually get to see one," said Andras Gaspar of the University of Arizona. "We believe that we were at the right place at the right time to have witnessed such an unlikely event with the Hubble Space Telescope."

"Our study, which analysed all available archival Hubble data on Fomalhaut b, including the most recent images taken by Hubble, revealed

several characteristics that together paint a picture that the planet-sized object may never have existed in the first place". Hubble images from 2014 showed the object had vanished, to the disbelief of the astronomers. Adding to the mystery, earlier images showed the object to continuously fade over time. Clearly, Fomalhaut b was doing things a bona fide planet should not be doing.

The resulting interpretation is that Fomalhaut b is not a planet but a slowly expanding cloud blasted into space as a result of a collision between two large bodies. Researchers believe the collision occurred not too long prior to the first observations taken in 2004. By now the debris cloud, consisting of dust particles around 1 mi-

cron (1/50th the diameter of a human hair), is below Hubble's detection limit. The dust cloud is estimated to have expanded by now to a size larger than the orbit of Earth around our Sun.

Equally confounding is that the object is not on an elliptical orbit, as expected for planets, but on an

escape trajectory, or hyperbolic path. "A recently created massive dust cloud, experiencing considerable radiative forces from the central star Fomalhaut, would be placed on such a trajectory," Gaspar said. "Our model is naturally able to explain all independent observable parameters of the system: its expansion rate, its fading, and its trajectory."

Because Fomalhaut b is presently inside a vast ring of icy debris encircling the star, the colliding bodies were likely a mixture of ice and dust, like the cometary bodies that exist in the Kuiper belt on the outer fringe of our solar system. Gaspar and Rieke estimate that each of these comet-like bodies measured about 200 kilometers across. They also suggest that the Fomalhaut system may experience one of these collision events only every 200,000 years.

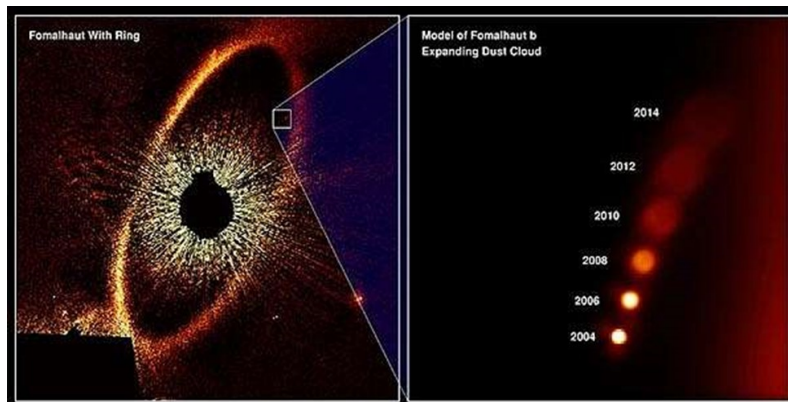


Illustration from the Hubble Space Telescope's observations of Fomalhaut b's expanding dust cloud from 2004 to 2013. The cloud was produced in a collision between two large bodies orbiting the bright nearby star Fomalhaut. This is the first time such a catastrophic event around another star has been imaged.

Adopt a Telescope Program - Signup Sheet

Adopter	Scope	Location
1 Sue Timlin/John Hammetter	18" F/4.5 Obsession	Wiesen Observatory
2 Steve Volp	12.5" F/7.4 Buckstaff	B Dome
3 Robert Burgess	12.5" F/9 Halbach	A Dome (Armfield)
4 Russ Blankenburg	18" F/4.5 Obsession	Albrecht Observatory
5 Jeff Kraehnke	14" F/7.4 G-scope	Z Dome
6 Lee Keith/Tom Kraus	12" F/10 LX200 EMC	Tangney Observatory
7 Herman Restrepo/Colin Boynton	10" F/6.3 LX200	Ray Zit Observatory
8 Tamas Kriska	Stellarvue SVQ 100 F/5.8	Jim Toeller Observatory
9 Paul Borchardt	Solar scope	SkyShed POD

At Your Service

Officers / Staff

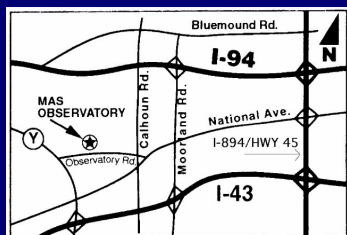
President	Tamas Kriska	414-581-3623
Vice President	Lee Keith	414-425-2331
Treasurer	Sue Timlin	414-460-4886
Secretary	Agnes Keszler	414-581-7031
Observatory Director	Paul Borchardt	262-781-0169
Asst. Observatory Director	Jeff Kraehnke	414-333-4656
Newsletter Editor	Tamas Kriska	414-581-3623
Webmaster	Gene Hanson	262-269-9576

Board of Directors

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Scott Berg	262-893-7268
Russ Blankenburg	262-938-0752
Clark Brizendine	414-305-2605
Jason Doyle	414-678-9110
John Hammetter	414-519-1958
Jeff Kraehnke	414-333-4656
Jim Schroeter	414-333-3679
Gabe Shaughnessy	262-893-4169
Steve Volp	414-751-8334
Mike Wagner	262-547-3321

May Keyholders

05/02 Steve Volp	414-751-8334
05/09 Paul Borchardt	262-781-0169
05/16 Gene Hanson	262-269-9576
05/23 Sue Timlin	414-460-4886
05/30 Jim Bakic	414-303-7765



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