



STAR STUFF

Ford Amateur Astronomy Club Newsletter

Star Stuff

This newsletter is published eleven times per year by:

Ford Amateur Astronomy Club
P.O. Box 7527
Dearborn, MI 48121-7527

Officers

President:	Arica Flores
Vice President:	Ed Halash
Secretary:	Jesse Godsey
Treasurer:	Joseph Bostic

Departments

Webmaster:	Liam Finn
Membership:	Doug Bauer
Newsletter:	Tim Campbell
Equipment:	Jeff Gorman
Speakers:	Sandra Macika

Club Information

The Ford Amateur Astronomy Club meets on the fourth Thursday of each month, except for the combined November/December meeting which meets on the first Thursday of December – at Henry Ford College Administration Services and Conference Center in Dearborn.

President's Corner

by Arica Flores, President

Don't forget the final general membership meeting of the year will be a pot-luck.

I am looking forward to some good food, good friends, and nice conversations.

If you want a FAAC coffee-mug (featuring the club logo), we do have more of those. They are \$6 and I will bring them to the pot-luck.

In other news, the club officer elections will take place during the January meeting. The nominating committee will announce the slate of candidates at the December meeting.

Secretary's Report

by Cheri Grissom, filling in for Jesse Godsey, Secretary

FAAC General Meeting – October 26, 2023

Meeting called to order at 7:07 p.m. by our Vice President, Ed Halash. Present online were President, Arica Flores, and Treasurer, Joe Bostic. Secretary, Jesse Godsey, absent. We had fifteen in-person attendees and seven online. Tonight's meeting was held in the Technology Building on the HFC campus, in the Ghafari conference room.

Ed reminded everyone about our upcoming November/December combined meeting that will take place on December 7. This will take the place of the General Meeting in both November and December, and will be considered our Holiday Potluck get-together. Due to the nature of this meeting, it will be in-person only, no online option. There will be no board meeting in December; however, we will have one more board meeting this year, on November 2.

Club Information

Refer to our website for a map and directions:

www.fordastronomyclub.com

Observing

The FAAC primary observing location is Spring Mill Pond located within the Island Lake State Recreation Area near Brighton, Michigan. The Club maintains an after-hours permit. Club members can contact any club officer for procedures to enter or exit the park when the main gate is locked.

The club also has use of a private observing site near Gregory Michigan. See the FAAC Groups.io Group for more information.

Inquiries can be directed to info@fordastronomyclub.com

Membership

Membership is open to anyone with an interest in amateur astronomy. The FAAC is an affiliate of the Ford Employees Recreation Association (FERA).

Fees

Annual - New Members: \$30
Annual - Renewals: \$25
(\$30 if not renewed by Jan 31)

Benefits

Membership includes the Star Stuff newsletter, discounts on magazines, discounts at selected

Doug Bauer advised that we added a total of five new members from Astronomy at the Beach.

Member Observing Reports

We combined member introductions with observing experiences. Did anybody see any part of the recent annular eclipse? Doug Bauer was in South Carolina and saw a partial. Kristie Whittington spent some time in Utah and had an excellent view of the annular eclipse and lots of dark sky objects with her 16" Dob. John Lines also traveled to Utah for a good view of the eclipse. Other observing experiences besides the eclipse: Milton French joined the Farmington Stargazers at Maybury State Park recently for some nice viewing. Liam Finn observed two recent excellent pass-overs of the Starlink satellites. Frank Ancona was vacationing in the Petoskey area and reported that light pollution has greatly increased in that area. He also spent some time observing in Florida recently. John McGill was at Cape Kennedy to watch the launch via the Falcon Heavy rocket of the mission to the asteroid 16 Psyche. He also caught the return of a crew mission from the ISS which landed in the Atlantic but passed right over him in Florida first. Jeff Gorman has had his new-to-him Coulter Dob out but hasn't had an opportunity to see much other than Jupiter so far. John Lines says the skies in Colorado have been superb.

What's Up in the Night Sky

Tim Campbell filled in for Gordon Hansen this month. Tim started off by going over our upcoming meeting dates. November is still a great month to view a number of galaxies, including M31, Andromeda; M33, Triangulum; and M74, Phantom. November 9 is the opposition of Jupiter and should be a great view, if we have clear skies. Tim also provided a chart listing the Galilean moon transits of Jupiter for the upcoming month. He will send a copy of this to the membership via Groups.io. Also, November 4 and 5 will be the peak of the Taurids meteor shower, and November 17 and 18, the Leonids. Tim also gave us an interesting sky tour of constellations currently viewable with names that may be familiar to those who have seen the movie "Clash of the Titans," i.e., Perseus, Cassiopeia, Andromeda, etc. Deep sky objects still easily seen include M13, the Hercules Cluster; the Double Cluster in Perseus, and the E.T. or Owl Cluster in Cassiopeia.

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area equipment retailers, and after-hours access to the Island Lake observing site and private observing sites.

Astronomy or Sky & Telescope magazine discounts are available by contacting the FAAC club treasurer treasurer@fordastronomyclub.com for the discount form. The form should be sent to the respective publisher with your subscription request and payment. Do not send money directly to FAAC.

The FAAC has a pool of equipment including telescopes, cameras, and other gear used for outreach. Much of the gear can be borrowed for personal use in the interest of furthering your knowledge and experience in astronomy.

Please see the equipment list for further information.

Club Wear

Club logo-wear (embroidered with club logo) can be ordered directly through LLBeanBusiness.com

See the groups.io files section for ordering information and instructions on how to request the correct logo.

Communication

The FAAC uses Groups.io for our email distribution list (both formal and informal discussion.)

Observing nights & locations (scheduled and unscheduled as weather permits), equipment

A Flame in the Sky — the Orion Nebula

by Kat Troche



It's that time of year again: winter! Here in the Northern Hemisphere, the cold, crisp sky offers spectacular views of various objects, the most famous of all being Orion the Hunter.

As we've previously mentioned, Orion is a great way to test your sky darkness. With your naked eye, you can easily spot this hourglass-shaped constellation. Known as an epic hunter in Greco-Roman, Orion and all its



Credit: Stellarium Web

parts have had many names and meanings across many cultures. In Egyptian mythology, this constellation represented the god Sah. The Babylonians referred to it as The Heavenly Shepard. In most cultures, it is Orion's Belt that has many stories: Shen in Chinese folklore, or Tayamnicankhu in Lakota storytelling. But the Maya of Mesoamerica believed that part of Orion contained The Cosmic Hearth – the fire of creation.

1,500 light years away from Earth sits the star-forming region and crown jewel of Orion – Messier 42 (M42), the Orion Nebula. Part of the “sword” of Orion, this cloud of dust and gas sits below the first star in Orion's Belt, Alnitak, and can easily be spotted with the naked eye under moderate dark skies. You may also use binoculars or a telescope to resolve even more

questions, events, outreaches, etc. are normally discussed via this list.

Join by visiting <https://groups.io/g/FordAstronomyClub> to request membership.

Articles & Submissions

Your submissions to Star Stuff are welcome! Send your story and/or images to the editor at: starstuff@fordastronomyclub.com

Observatory

The FAAC maintains and operates the Hector J Robinson Observatory (HJRO) at Lincoln Park Schools.

The observatory houses a 14" Celestron C14 Schmidt Cassegrain Telescope as well as other instruments and can be used by club members.

The observatory is adjacent to the athletic field situated between the Lincoln Park Middle School and High School buildings near

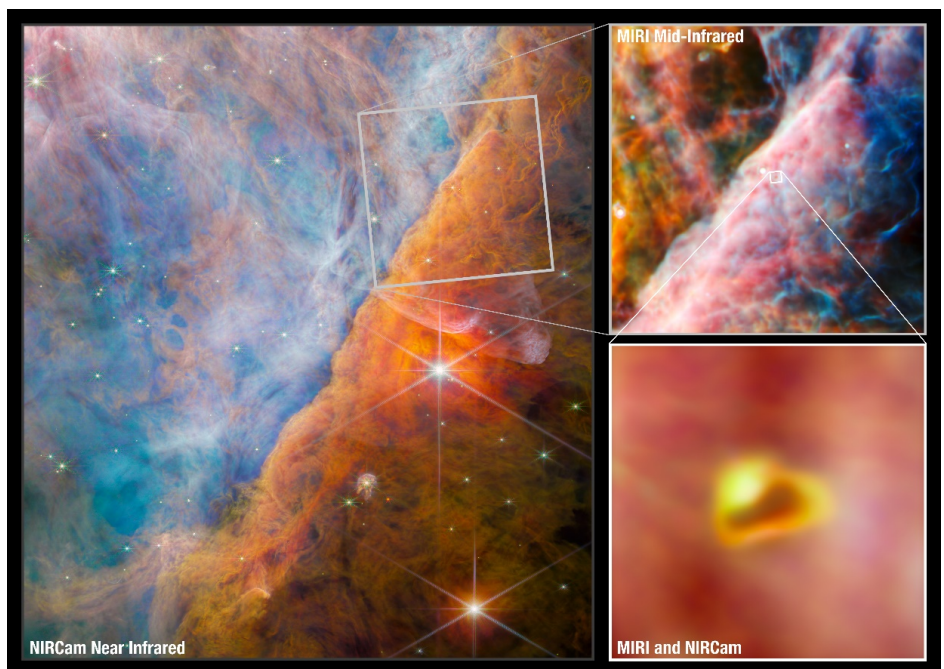
1701 Champaign Rd.
Lincoln Park, MI 48146

The school system has designated four "key-holders" within the club who have the ability to open the observatory.

Call (313) 444-5850 to learn when the observatory is opening (or request an opening).

details, like the Trapezium: four stars in the shape of a baseball diamond. These young stars make up the core of this magnificent object.

Of course, it's not just for looking at! M42 is easily one of the most photographed nebulae around, by astrophotographers here on the ground, large ground-based observatories, and space telescopes alike. It has long been a place of interest for the Hubble, Spitzer, and Chandra X-ray Space Telescopes, with James Webb Space Telescope joining the list in February 2023. Earlier this year, NASA and the European Space Agency released a new photo of the Orion Nebula taken from JWST's NIRCam (Near-Infrared Camera), allowing scientists to image this early star forming region in both short and long wavelengths.



ESA/Webb, NASA, CSA, M. Zamani (ESA/Webb), PDRs4ALL ERS Team

But stars aren't the only items photographed here. In June 2023, JWST's NIRCam and MIRI (mid-infrared instrument) imaged a developing star system with a planetary disk forming around it. That's right – a solar system happening in real time – located within the edges of a section called the Orion Bar. Scientists have named this planet-forming disk d203-506, and you can learn more about the chemistry found here. By capturing these objects in multiple wavelengths of light, we now have even greater insight into what other objects may be hiding within these hazy hydrogen regions of our night sky.

In addition to our Dark Sky Wheel, a fun presentation you can share with your astronomy club would be our Universe Discovery Guide: Orion

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Planetarium

FAAC members are volunteer operators for the Hammond Planetarium at Henry Ford College.

Planetarium shows are free and open to the public.

Four seasonal planetarium shows are offered per year with the stars and constellations of the current season as well as a multi-media presentation featuring select planets.

Public planetarium shows are normally the third Wednesday of each month at 7:00pm. Please see the planetarium schedule for specific times. It is posted here:

fordastronomyclub.com/hfc-planetarium

Social Media

The FAAC has several social media accounts. Members are encouraged to join and follow them.

Facebook

facebook.com/FordAstronomyClub

Twitter

twitter.com/Ford_Astro

Scheduled Club Events

Month	Date	Sunset	Location
April	8th		Total Solar Eclipse
April	13th	8:13pm	Spring Mill Pond
May	11th	8:44pm	Spring Mill Pond
June	15th	9:11pm	Spring Mill Pond
July	13th	9:08pm	Spring Mill Pond
August	10th	8:40pm	Spring Mill Pond
September	20 & 21st	7:32pm	Kent Lake Beach Astronomy at the Beach

Hammond Planetarium

Date	Time	Topic
December 20th	7:30pm	Club Social

Upcoming Club Meeting Topics & Speakers

Meeting	Speaker	Topic
December 7th	None	Club Social
January 25th	TBD	
February 22nd	TBD	

November December Talk Details

Club Social

Ford Amateur Astronomy Club

Description:

The combined November-December meeting traditionally does not include a featured speaker. This meeting is a club social with pot-luck food, sometimes a bit of show & tell or ask-the-astronomer.

A planetarium show may be offered following the social if there is interest.

*Secretary's Report (Con't from Page 2)**Club Business*

Treasurer: Joe Bostic gave our treasurer's report. Secretary: Cheri Grissom had nothing to report but provided new plastic badge holders to a couple members who needed replacements. Club Equipment: Jeff had nothing new to report. Social Media/Website: Liam had nothing new to report. Nominating Committee: Gordon Hansen is the head of this committee and was absent tonight but is putting things together.

Tim advised that 2024 observing dates are in "StarStuff" tentatively, but wants to double-check and see if any of them need to be changed.

Ed reminded everyone once again to please consider using Groups.io if you are thinking of going out to any of our favorite sites to observe and would like company.

Finally, Ed gave us another reminder about the remaining meeting dates for the year. If you have any questions, please refer to either our website, fordastronomyclub.com, or the calendar in Groups.io. Our December 7 combined meeting will be a potluck, but please limit your contributions to non-messy "finger foods." In other words, we want to be careful of not making any spills on the auditorium floor. It's not required but would be helpful if members would post to Groups.io what they are bringing to avoid a lot of duplicates. Again, the meeting will be in-person only.

Speaker

Long-time club member Sandra Macika was our speaker this evening and gave a talk entitled "The 100th Anniversary of the Day We Discovered the Universe." On the night of October 5 and 6 of 1923, Edwin Hubble took a plate image of the Andromeda Galaxy with the 100" Hooker Telescope. He had

imaged the first Cepheid variable star, which put an end to the question of what exactly these faint fuzzies in the sky were. For over a hundred years, astronomers had debated their exact nature, whether they were spiral nebulae (clouds), proto-solar-type systems, or some kind of island universes. Sandra detailed the decades of observations and discoveries that finally led to the answer that these were entire galaxies, like our own Milky Way, that were vast distances from us. Suddenly, the universe was almost unimaginably larger than ever before thought to be.

A question-and-answer period followed.

Meeting adjourned at 9:10 p.m.

November 2, 2023 Board Meeting Summary

(Videoconference meeting.) All board members present except for Jesse Godsey. Five additional members present.

Our meeting was brief this month. Topics covered included our upcoming November/December combined meeting, which is our annual Holiday Potluck. There will be no guest speaker and no What's Up segment. We will have Show-and-Tell, with perhaps some of the club's own telescopes being featured if they can be brought in by their caretakers. We will also have a Q-and-A, or Ask the Astronomer session, where anyone can ask anything astronomy-related, and hopefully get answers to their questions and/or generate some interesting and informative discussion. Plus, lots of good food! The club will provide pizza. If possible, please bring something to share, but non-messy finger foods only.

We talked about the Hammond Planetarium on campus at HFC, and it was suggested that we start including show dates in "StarStuff" for the benefit of our members who may like to attend a show. It was

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Equipment

The FAAC maintain an equipment pool of telescopes, binoculars, cameras, and other equipment used for special events. Much of this equipment is available to members.

Each piece of equipment is either stored by a club volunteer who offers to be the caretaker of the item, or by the person who last borrowed the item.

Most equipment can be borrowed for one-month durations. At the end of the month, the borrower can extend the loan if no other members have requested it.

Some items are reserved for special events use and are not normally available to be borrowed.

If you are interested in borrowing an item, please contact either the current holder of the equipment, or contact the club equipment manager, Jeff Gorman, at equipment@fordastronomyclub.com

Item	Held by	Item	Held by
Telescopes		Display Items	
TK1 Coronado Personal Solar Telescope (Doublestack) w/Meade Autostar Goto Mount	Jessica Edwards	Astronomy Event Sign (3' x 6')	Gordon Hansen
TK5 4.5" Reflector on Fitz GEM mount	Jerry Jamula	Astronomy Event Signs 18x24" (x8)	Liam Finn
TK6 8" Orion XT8i Dobsonian	Dan Smith	PVC Display Board - Folding	Sandra Macika
TK7 TPO 8" f/4 Newtownian Astrograph (OTA Only - no mount)	Gary Gibson	Banner - Small (24" x 32")	George Korody
TK8 20" f/5 Obsession Dob, Ladder & EP Kit	Liam Finn	Banner - Medium (24" x 72")	Sandra Macika
Presentation Tools		Banner - Large (32" x 16')	George Korody
Projector (older)	Jim Frisbie	Tri-Fold Presentation Boards	George Korody
Projector (newer)	Gordon Hansen	Other	
Projection Screen 8'	John McGill	Canopy (10' x 10')	Liam Finn
Projection Screen 6'	Liam Finn	Pop Cooler	Sean Pickard
Bullhorn	Liam Finn	TA Sky Quality Meter	Liam Finn
Speaker System w/Wireless Mic	Liam Finn	Demonstration Tools	
		Weigh on Planets Scale	Liam Finn
		Lunar Phase Kit	Bob MacFarland
		100' Scale Model Solar System Kit	Bob MacFarland
		NSN Meteorite (Outreach) kit	Sandra Macika

Item	Held by
Imaging Cameras	
C2 Meade Deep Sky Imager Pro III w/Autostar Suite	Gordon Hansen
C6 Canon 60Da Astrophotography DSLR and accessories	Tim Dey
Other Imaging Equipment	
CA1 Rigel Systems Spectrascope	Gordon Hansen
C7 Canon EOS EF 70-200mm f/1.4L IS USM lens & tripod mounting ring (for Canon EOS cameras)	Gordon Hansen
Rokinon 8mm f/3.5 Fish-Eye Lens (Canon EOS Mount)	John McGill
Special Event Items - Not available for Loan Out	
BK2 Zhumell 25x100 Binoculars, hard case, & Zhumell TRH-16 tripod w/soft fabric bag	Sandra Macika
TAK1 Night Vision Image Intensifier for telescopes (2" barrel size)	Tim Dey
Lunt 100mm H-alpha Solar Telescope with Celestron CG-5 equatorial mount	Tim Campbell

Secretary's Report (Con't from Page 8)

initially thought we may include a planetarium show for our November/December meeting for those who wanted to go over there, but it was decided to save that for another meeting.

Our nominating committee for 2024 officers consists of Gordon Hansen, Dennis Salliotte, and Tim Campbell. Look for a slate of prospective officers to be presented soon.

As first suggested last month, the board has decided, going forward, to forego a guest speaker a few times a year and instead have a social-hour type of meeting. Arica and Sandra have discussed this, and Sandra will provide speakers for eight of our 2024 meetings, leaving three meetings per year purely for socializing (our annual Holiday Potluck, plus two other meetings throughout the year).

Orion Nebula (Con't from Page 4)

Nebula, Nursery of Newborn Stars activity. This will allow you to explain to audiences how infrared astronomy, like JWST, helps to reveal the secrets of nebulae. Or, you can use public projects like the NASA-funded MicroObservatory to capture M42 and other objects.

Learn more about what to spy in the winter sky with our upcoming mid-month article on the Night Sky Network page through NASA's website!