



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:	Mike Bruno
Vice President:	Ed Halash
Secretary:	Cheri Grissom
Treasurer:	Arica Flores

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.

Secretary's Report

by Cheri Grissom

FAAC General Meeting – October 28, 2021

Our videoconference meeting was called to order by President Mike Bruno at 7:15 p.m. Board members Ed Halash and Arica Flores were absent. A total of 19 people were in attendance. Some joined as the meeting was already in progress.

Member Observing Experiences:

A couple members were able to catch the solar flares last week. John McGill was in Florida to watch NASA's Lucy launch on October 16, a probe that will be visiting parts of the main asteroid belt as well as some of Jupiter's trojan asteroids (asteroids that share Jupiter's orbital path around the sun). John said the launch was very nice, and while down there, he also had an opportunity to see one of the reusable Space X boosters in person.

What's Up:

Tim Campbell gave the report for November's skies. First an important reminder about our club meetings calendar. Because the November general meeting always falls on Thanksgiving and the December general meeting is always very close to Christmas, the club typically combines those two meetings into one, which takes place on the first Thursday in December, this year December 2. We usually call it our annual holiday potluck meeting, but of course, since we will be meeting virtually, there will be no potluck to share. Still, we hope to see many of you attending. And because the date of the combined meeting falls on what would normally be our board meeting date, we always forego a board meeting in December, and so the last board meeting of the year will be November 2, to resume again January 6, 2022.

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

The Taurid meteor shower is expected to peak on November 4, and the Leonids are expected to peak November 17. There will be a partial lunar eclipse (really more like near-total for us) in the pre-dawn hours of November 19.

Venus is still bright and beautiful in the southwest in the evening. It will be at greatest eastern elongation on October 29. Other planets visible in November will be Jupiter, Saturn, Uranus, and Neptune. Uranus will be at opposition November 4. On November 23, Ganymede and Callisto will both be doing a shadow transit of Jupiter, with one of them very near the Great Red Spot.

M31, the Andromeda Galaxy, is very easy to spot via star-hopping from the constellations Pegasus and Andromeda. It is our nearest major galactic neighbor. Because it is so huge and with the limitations of our skies and equipment, what most of us will be seeing is just the bright central core of this beautiful galaxy.

A couple of comets of interest: Comet 67P is a telescopic-only object, but Comet Leonard will reach its closest approach to Earth on December 12, and might -- just might -- reach naked eye visibility. Even if it doesn't, it should be nice in binoculars and telescopes.

Club Reports:

None tonight.

Speaker:

Don Klaser, a long-time FAAC member, past president, and host of Astronomy For Everyone, gave a talk on "Fall and Winter Skylore and Mythology: Stories From Around the World." Don started with an explanation of what mythology is and the many different sources of the stories.

He took us through the constellations of Andromeda, a story that is perhaps 3,000 years old, then Perseus, Cetus, Cepheus, Cassiopeia, Pegasus, Capricornus, Orion, Taurus, Gemini, Canis Major, and the Pleiades. With each of these constellations, he told us the stories associated with them from different cultures and religions, oftentimes amazingly alike considering the separations of time and distance, but sometimes interpreted very differently by different peoples throughout history. He also talked specifically about the star Sirius and the Milky Way in general. The Milky Way was called, by both the Inuit people of

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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

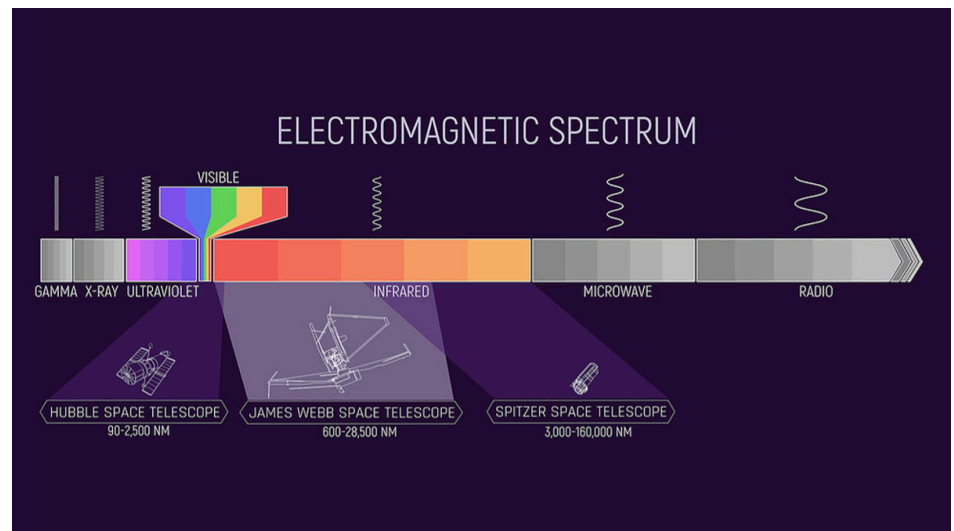
The James Webb Space Telescope: Ready for Launch!

by David Prosper



NASA's James Webb Space Telescope is ready for lift-off! As of this writing (November 15), the much-anticipated next-generation space telescope is being carefully prepared for launch on December 18, 2021, and will begin its mission to investigate some of the deepest mysteries of our universe.

The development of the Webb began earlier than you might expect – the concept that would develop into Webb was proposed even before the launch of the Hubble in the late 1980s! Since then, its design underwent many refinements, and the telescope experienced a series of delays during construction and testing. While frustrating, the team needs to ensure that this extremely complex and advanced scientific instrument is successfully launched and deployed. The Webb team can't take any chances; unlike the Hubble, orbiting at an astronaut-serviceable 340 miles (347 km) above Earth, the Webb will orbit about one million miles away (or 1.6 million



Webb will observe a wide band of the infrared spectrum, including parts observed by the Hubble - which also observes in a bit of ultraviolet light as well as visible - and the recently retired Spitzer Space Telescope. Webb will even observe parts of the infrared spectrum not seen by either of these missions! Credits: NASA and J. Olmstead (STScI)

km), at Lagrange Point 2. Lagrange Points are special positions where the gravitational influence between two different bodies, like the Sun and Earth, "balance out," allowing objects like space telescopes to be placed into stable long-term orbits, requiring only minor adjustments - saving Webb a good deal of fuel.

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.

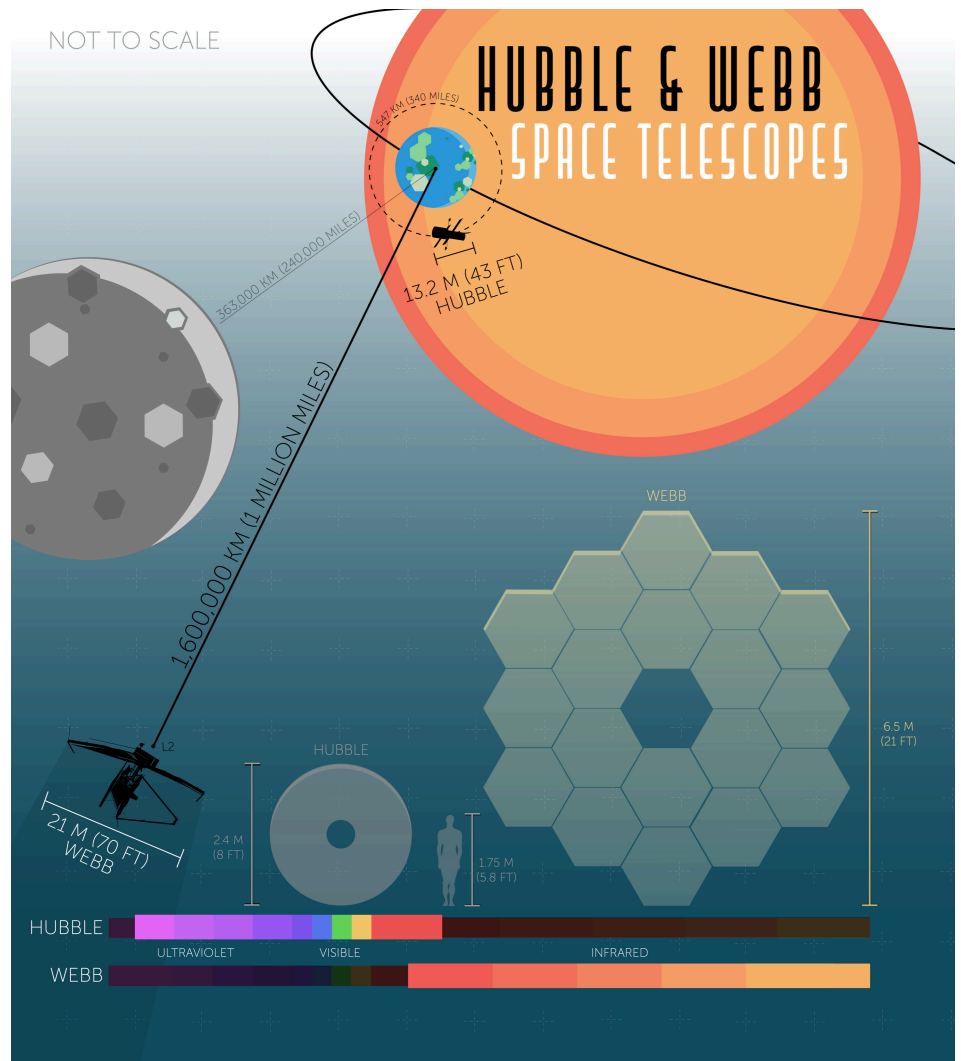
The observatory is adjacent to the athletic field situated between the Lincoln Park Middle School and High School buildings near

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).

Since this position is also several times further than the Moon, Webb's sunshield will safely cover the Moon, Earth, and Sun and block any potential interference from their own infrared radiation. Even the seemingly small amount of heat from the surfaces of the Earth and Moon



Webb will follow up on many of Hubble's observations and continue its mission to study the most distant galaxies and stars it can - and as you can see in this comparison, its mirror and orbit are both huge in comparison, in order to continue these studies in an even deeper fashion! Credits: NASA, J. Olmsted (STScI)

would interfere with Webb's extraordinarily sensitive infrared observations of our universe if left unblocked. More detailed information about Webb's orbit can be found at bit.ly/webborbitinfo, and a video showing its movement at bit.ly/webborbitvideo.

Once in its final position, its sunshield and mirror fully deployed and

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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 offered each Wednesday at 7:30pm and every 2nd Saturday at 3:00pm – however there are some exceptions. 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

MeetUp

meetup.com/Ford-Amateur-Astronomy-Club

Scheduled Club Events

Month	Date	Sunset	Location
April	9th	8:08pm	Spring Mill Pond
May	7th	8:39pm	Spring Mill Pond
June	4th	9:05pm	Spring Mill Pond
July	9th	9:11pm	Spring Mill Pond
August	13th Perseid Meteors & Club Picnic	8:46pm	Spring Mill Pond
September	16 & 17th AatB	7:40pm	Kent Lake Beach
October	1st	7:14pm	Spring Mill Pond

Upcoming Club Meeting Topics & Speakers

Meeting	Speaker	Topic
December 2nd	None	Social and open discussion

December Talk Details

Open discussion

FAAC Members

The club meetings that would normally fall on the 4th Thursday of each month are combined in November in December due to conflicts with holidays. The meeting is held on the first Thursday of December. This is the final club meeting of the year. After the new year, the normal meeting schedule resumes.

The club does not schedule a speaker for this meeting. It is meant to be a social gathering. During our in-person meetings (when we are able to resume) this would be a pot-luck, show & tell, ask-the-astronomer, and general open discussion.

James Webb (Cont'd from Page 4)

instruments checked out, Webb will begin observing! Webb's 21-foot segmented mirror will be trained on targets as fine and varied as planets, moons, and distant objects in our outer Solar System, active centers of galaxies, and some of the most distant stars and galaxies in our universe: objects that may be some of the first luminous objects formed after the Big Bang! Webb will join with other observatories to study black holes - including the one lurking in the center of our galaxy, and will study solar systems around other stars, including planetary atmospheres, to investigate their potential for hosting life.

Wondering how Webb's infrared observations can reveal what visible light cannot? The "Universe in a Different Light" Night Sky Network activity can help - find it at bit.ly/different-light-nsn. Find the latest news from NASA and Webb team as it begins its mission by following #UnfoldTheUniverse on social media, and on the web at nasa.gov/webb.

Secretary's Report (Cont'd from Page 2)

the Far North, as well as the Kalahari Bushmen from southern Africa, as the Ashen Path. Don feels that some of the most fascinating stories he has studied have come from the Australian Aboriginal peoples and the native peoples of the North American continent.

Questions and answers followed, with Don's presentation finishing up around 9:00 p.m. We then had a discussion with a member seeking advice about a telescope purchase. A reminder that Liam Finn and Tim Campbell are doing an outreach event at the Henry Ford Museum on December 18. John McGill reminded everyone that new episodes of Astronomy for Everyone (our YouTube channel) are out, featuring the Great Lakes Star Gaze. Meeting was adjourned at 9:12 p.m.

FAAC Board Meeting Summary – November 4, 2021

(Videoconference meeting.) All board members present except Ed Halash. Seven additional members were present.

Our primary discussion topics were the nominations for 2022 officers, and the upcoming combined November/December meeting. That meeting is usually our Holiday Potluck, but of course we are still meeting virtually, so that's not possible. Still, we try to make it fun by doing a few things we don't normally do at meetings. We will have an "Ask the Astronomer" session, where questions on anything related to astronomy or equipment will be welcome. We will be announcing the 2021 Sirius Award winner. We are also encouraging members to give a brief five-to-ten-minute talk on any astronomy-related topic of their liking.

For the 2022 Board, all four of the board positions, president, vice-president, secretary, and treasurer are open to anyone in the club who may be interested in serving. Cheri's position is the only one that is term-limited, so the position of secretary will have to be filled by someone else. The other three board members can serve again if they so wish. This will all be discussed at the upcoming meeting, where you can ask questions if you like, or if you are unable to attend but are still thinking of running for one of the positions, feel free to contact someone on the board.

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	Bob MacFarland	Astronomy Event Signs 18x24" (x8)	Liam Finn
TK6 8" Orion XT8i Dobsonian	Sean Pickard	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	George Korody	TA Sky Quality Meter	Liam Finn
Speaker System w/Wireless Mic	Liam Finn	Demonstration Tools	
DVD Player	Dennis Salliotte	Weigh on Planets Scale	George Korody
		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)	George Korody