



# 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.

## Club Projects & Activities

*by Tim Campbell*

The *President's Corner* article is not available this month. I thought I'd add a brief article with activities.

We have resumed scheduled club activities (you'll notice the big red "On Hold" stamp is no longer covering up our activities) but with some caveats. At this time, the monthly club events are for members-only.

Island Lake State Recreation Area is currently remaining unlocked 24 hours due to staffing shortages. We are told they will resume locking the gate when they have enough staff. If you want to observe from the park, you won't need to worry about the gate. Please bring your club ID to identify yourself if you are in the park after-hours — should a ranger stop by to check.

The annual Club Picnic will be August 14. Burgers, corn on the cob, and beverages will be provided by the club. Members are encouraged to bring a side dish. That is normally the *same* day as the park's Meteors & S'mores event (Perseids peak on Aug 12 & 13). Park management is not yet sure if there will be a Meteors & S'mores event this year.

GLAAC has decided to host Astronomy at the Beach as an in-person event but will make this a mandatory masks-required event for all attendees and at all times. GLAAC was concerned that vaccines are not available to visitors under 12 years old ... and expect many such visitors to attend with their parents. This will be a more basic version of the event — primarily just the telescope field. Clubs are encouraged to setup their own canopies with club tables. There will not be a giant tent for clubs nor will there be a speaker tent.

Some interest has been expressed regarding making regular use of Hector J Robinson Observatory (at Lincoln Park Middle School). There are four

## Club Information

Refer to our website for a map and directions:

[www.fordastronomyclub.com](http://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](mailto: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

key-holders in the club who can open the observatory. For scheduling purposes, really only two of the key-holders are likely to be able to open the observatory for these events. Currently, a key-holder may open the observatory when both weather and their personal schedules permit. But this results in last-minute notices of opening events rather than scheduled events. Please discuss at the club meeting or via Groups.IO to determine if there is sufficient interest for scheduled events.

Lastly, while not specifically a club event, the annual Great Lakes Star Gaze is scheduled for September 9th through 12th (Thurs through Sunday). The event is located at River Valley RV Park in Gladwin Michigan. See <http://www.greatlakesstargaze.com> for more information.

## Secretary's Report

*by Cheri Grissom*

### FAAC General Meeting – June 24, 2021

Our videoconference meeting was called to order by President Mike Bruno at approximately 7:02 p.m. All board members present. A total of 18 people attended.

#### *Member Observing Experiences:*

Gary Gibson had occasion to be in Colorado recently and was able to have some amazing views of the Milky Way from dark skies. Jeff Gorman also got some great views of the Milky Way during a visit to the Upper Peninsula. Tim Campbell shared some time lapse photos of the recent ISS transit of the sun. A few of our members had varying views of the annular solar eclipse of June 10, which would have been a partial eclipse from our vantage points in Michigan.

#### *What's Up:*

Mike Bruno presented. He went over our calendar of events, which can be accessed on our website or social media sites. Mercury will be at greatest western elongation on July 4. The Delta Aquariids meteor shower will peak July 28-29. Evening planets in July will be Venus and Mars, with Jupiter and Saturn rising before midnight. Mike listed several comets that may be visible in telescopes soon. There are many summer sights to enjoy: the Summer Triangle, the Coat Hanger, the Ring Nebula and the Double-Double in Lyra, along with many beautiful open clusters. Also, July is the anniversary of the Apollo 11 moon landing.

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](mailto: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](http://LLBeanBusiness.com)

See the [groups.io](http://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

## Club Reports:

**Treasurer's Report:** Arica advises that our balance is \$10,285. She will be sending a check to WebEx for the continuation of our videoconference meetings. This is a change from what was previously discussed where it was going to be Zoom. Gordon Hanson advises that he was able to get a better price from WebEx.

**Social Media/Website:** Liam Finn advises that he will be doing some website maintenance and updates soon. This will not interfere with usage of the site in any way.

Mike and Tim C. discussed GLAAC. The only thing known for sure about Astronomy at the Beach is ~~there will be a virtual event this year~~. Whether any part of it will be in person is unknown at this point in time. It would probably be on a small scale if at all. *[Editor's note: GLAAC has opted to host only an in-person event and forgo plans for a virtual component due to lack of sufficient Internet access at the park.]*

We had a second virtual astronomy beginners' night/hangout chat/ask-the-astronomer type of session on June 6, broadcast simultaneously on Zoom and YouTube, from the Hector J. Robinson Observatory in Lincoln Park. We had a successful night, with many guests in attendance.

Bob McFarland made an announcement that the Seven Ponds Astronomy Club would be putting on a Zoom presentation about the James Webb telescope this Saturday. An invitation will be sent to all FAAC members via Groups.io.

## Speaker:

Dr. Elinor Gates, Staff Astronomer, Lick Observatory, gave a talk entitled "What's Up at Lick Observatory." Lick Observatory, located in Mt. Hamilton, California (the San Francisco Bay area), was funded by real estate investor James Lick and first opened to the public in 1888. For a time, its 36-inch refractor was considered the greatest telescope in the world and was the instrument used to make such first discoveries as the Encke gap in Saturn's rings, and the fifth known moon of Jupiter, Amalthea. Currently, the observatory's largest telescope is the Shane reflector, which is 3 meters in diameter and still does research every clear night.

Dr. Gates talked in detail about all of the research telescopes being used at Lick, their designs and purposes. She also spoke of the challenges

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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](mailto: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).

# Corner the Great Square of Pegasus

*by David Prosper*



The Summer Triangle may be the most famous seasonal star pattern, but during early August evenings another geometrically-themed asterism rises: the Great Square of Pegasus. This asterism's name is a bit misleading: while three of its stars - Scheat, Markab, and Algenib - are indeed found in the constellation of the winged horse Pegasus, its fourth star, Alpheratz, is the brightest star in the constellation Andromeda!

August evenings are an excellent time to look for the Great Square, as it will be rising in the east after sunset. If not obvious at first, wait for this star pattern to rise a bit above the murky air, and remember that depending on your point of view, it may appear more like a diamond than a square. Look for it below the Summer Triangle, or to the southeast of nearby Cassiopeia at this time. As the Great Square rises in prominence during autumn evenings, it becomes a handy guidepost to finding more constellations, including some of the dimmer members of the Zodiac: Aries, Pisces, Aquarius, and Capricornus. Like the Summer Triangle, the Great Square of Pegasus is also huge, but Pegasus itself is even larger; out of the 88 constellations, Pegasus is 7th in size, and feels larger as the stars in its neighboring constellations are much dimmer.

There are many notable deep-sky objects found within the stars of Pegasus - ranging from easily spotted to expert level targets - making it a great constellation to revisit as your observing skills improve. Notable objects include the densely-packed stars of globular cluster M15, a great first target. The potential "Milky Way look-alike" galaxy NGC 7331 is a fun target for more advanced observers, and expert observers can hop nearby to try to tease out the much dimmer interacting galaxies of Stephan's Quintet. A fascinating (but extremely difficult to observe) object is a gravitationally-lensed quasar famously known as the Einstein Cross. Pegasus has quite a storied history in the field of exoplanet research: 51 Pegasi was the first Sun-like star discovered to be host to a planet outside our solar system, now officially named Dimidium.

While observing Pegasus and its surroundings, keep your eyes relaxed and ready to catch some Perseids, too! August 2021 promises an excellent showing of this annual meteor shower. The crescent Moon sets early on

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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](http://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](https://facebook.com/FordAstronomyClub)

### Twitter

[twitter.com/Ford\\_Astro](https://twitter.com/Ford_Astro)

### MeetUp

[meetup.com/Ford-Amateur-Astronomy-Club](https://meetup.com/Ford-Amateur-Astronomy-Club)

## Scheduled Club Events

Month	Date	Sunset	Location
August	14th (Club Picnic)	7:35pm	Island Lake
September	11th (Tentative)	7:49pm	Island Lake
September	24 & 25 (Astronomy at the Beach)	7:26pm 7:24pm	Island Lake (Kent Lake Beach)
October	9th	7:00pm	Maybury State Park

## Upcoming Club Meeting Topics & Speakers

Meeting	Speaker	Topic
July 22nd	Dr. Rajib Ganguly	The Universe Through Superman's Eyes
August 26th	Dale Force	Cassini Radio Science: The Glenn Contribution
September 23rd	Jeffrey Woytach	Asteroid Missions - Psyche, DART and OSIRIS-REX
October 28th	Don Klaser	Skylor & Mythology - Fall/Winter

## June Talk Details

### The Universe Through Superman's Eyes

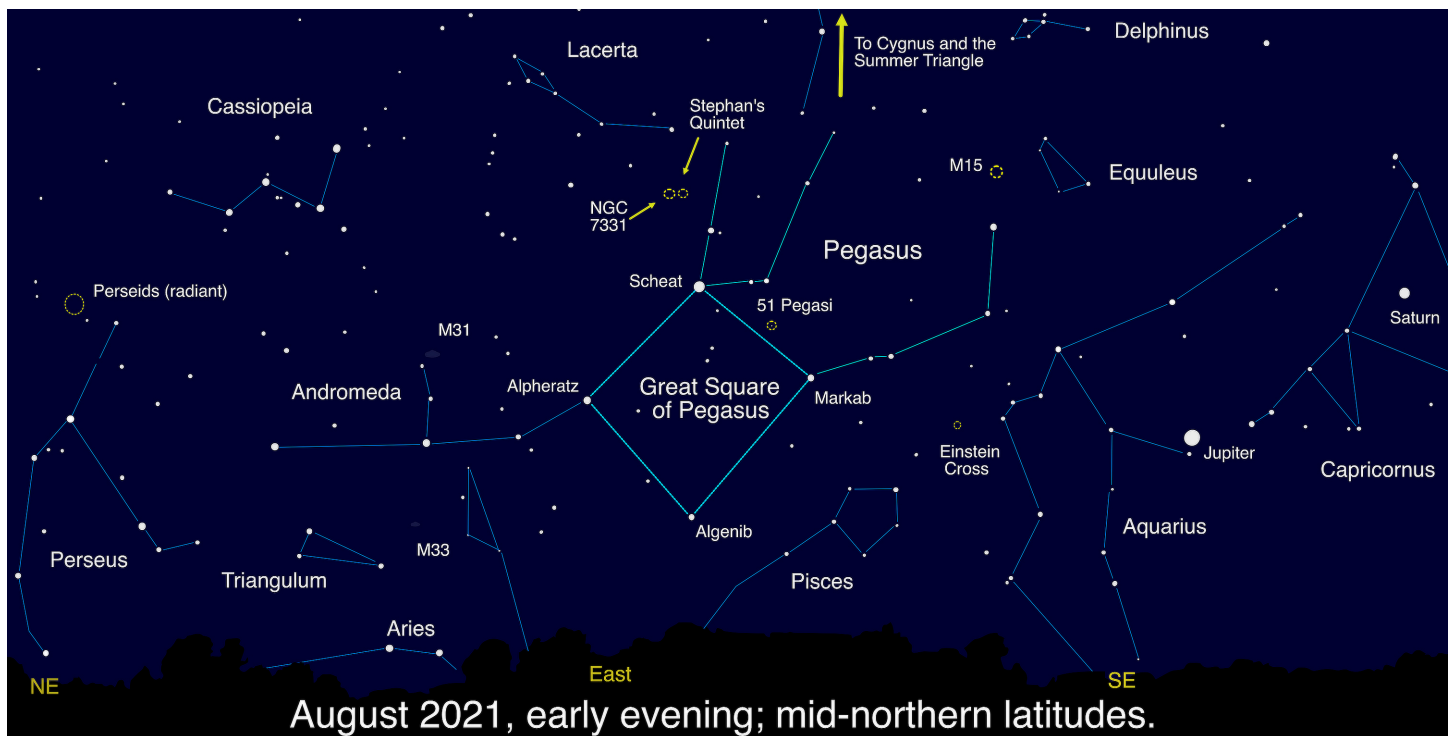
*Dr. Rajib Ganguly*

*Assoc. Prof. of Physics, Dept. of Computer Science, Engineering & Physics at  
University of Michigan - Flint*

We have all learned from childhood about the fantastic powers that Superman possesses, including X-ray vision. The Universe that Superman sees is much different than what we mere humans see. In this talk, we will take a tour of the Universe through Superman's eyes, finding black holes of all sizes, remnants from the explosion of stars, the gas between galaxies, and maybe even signs of dark matter.

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August 2021, early evening; mid-northern latitudes.

While the stars of the Great Square of Pegasus are not as bright as those of the Summer Triangle, they still stand out compared to their neighbors, and make a great foundation for exploring this area of the night sky. Note that the brightness of the stars near the horizon is exaggerated in this picture.

### *Pegasus (Cont'd from page 4)*

the evening of the shower's peak on August 11-12, but you can spot stray Perseids most of the month. If you trace the path of these meteors, you'll find they originate from one point in Perseus - their radiant. Giant planets Jupiter and Saturn will be up all evening as well. Look south - they easily stand out as the brightest objects in the faint constellations Aquarius and Capricornus.

Pegasus truly holds some fantastic astronomical treasures! Continue your exploration of the stars of Pegasus and beyond with NASA at [nasa.gov](http://nasa.gov).



*Stephan's Quintet is one of the most famous deep-sky objects in Pegasus. First discovered in 1877, it contains the first galaxy group discovered (which includes 4 of the 5 galaxies making up the Quintet) – and has been studied extensively ever since. One day this group will merge into one supergalaxy! While famous, these galaxies are hard to spot in all but the largest backyard telescopes – but are a favorite target of astrophotographers. Take a virtual flyby of these galaxies with a tour created from Hubble data at: [bit.ly/quintetflyby](http://bit.ly/quintetflyby)*

*Credit: NASA, ESA, and G. Bacon, J. DePasquale, F. Summers, and Z. Levay (STScI)*

# 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](mailto:equipment@fordastronomyclub.com)

Item	Held by	Item	Held by
<b>Telescopes</b>		<b>Display Items</b>	
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
<b>Presentation Tools</b>		Banner - Large (32" x 16')	George Korody
Projector (older)	Jim Frisbie	Tri-Fold Presentation Boards	George Korody
Projector (newer)	Gordon Hansen	<b>Other</b>	
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	<b>Demonstration Tools</b>	
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
<b>Imaging Cameras</b>	
C2 Meade Deep Sky Imager Pro III w/Autostar Suite	Gordon Hansen
C6 Canon 60Da Astrophotography DSLR and accessories	Tim Dey
<b>Other Imaging Equipment</b>	
CA1 Rigel Systems Spectroscope	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
<b>Special Event Items - Not available for Loan Out</b>	
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

### *Secretary's Report (Cont'd from page 3)*

posed by the Covid pandemic and how research was able to continue with a combination of some fully automated equipment, as well as some operators working from home. The major wildfires of August of 2020 posed a serious threat to the observatory and caused a full evacuation of personnel. The flames did reach observatory property, and while all the telescopes were saved, unfortunately, several other buildings and residences were lost or damaged.

A question-and-answer period followed.

Meeting adjourned at 9:01 p.m.

### **Board Meeting – July 1, 2021**

(Videoconference meeting.) All board members present except Arica Flores. Eleven additional members were present. Our main topic of discussion was upcoming events for the rest of the summer and the possibility of doing some of them in person. It was decided that Saturday, July 17, which would be our

normal Beginners' Night date, would be done in person at Island Lake, but for now, it will be a members-only event.

In August, we generally hold our picnic in conjunction with the Meteors and S'mores event at Island Lake. Liam reports that the park has made no decision yet about upcoming public events, so that part is on hold, but we could still hold our club picnic for members only. August 14 was mentioned as the probable date. Look for more information to follow.

Liam advised that the Lutz County Park has asked for feedback from club members who have been there on what they like about the park or what type of improvements would make it better. Liam asked that comments be sent to him, and he will summarize them and submit them to the park.

We also talked about the status of in-person meetings at HFCC, as well as planetarium shows. There is no word yet, but we are generally planning on our monthly meetings continuing to be virtual at least



until fall. The membership will be kept advised of any changes.

*June Talk Details (Cont'd from Page 5)*

**Bio:**

Rajib Ganguly, PhD worked at the Space Telescope Science Institute on Johns Hopkins University's Homewood campus in Baltimore. More recently, he spends most of his waking hours in his home office teaching physics and studying the environments of supermassive black holes.