



# 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: John McGill  
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.

## President's Corner

*by Mike Bruno*

Welcome to Spring! I hope everyone is enjoying the nice weather and clear skies we have been having this month. This is usually a very busy time of year for the Club, with Beginner's nights starting back up, the Swap meet & conference and Annual banquet, but we are still keeping our activities virtual and will continue to monitor the current environment for social gatherings. We hope in the foreseeable future to be able to get back together.

With that said there is a lot going on in Astronomy and Space exploration. Perseverance is already roaming on Mars & Ingenuity is about to take flight! There is a new nova, (N Cas 2021) we all can observe in Cassiopeia with a little assistance with Binoculars or your favorite telescope, get out and find it before it dims away. And now with Winter fading away you, Orion is setting earlier each night. Go observe the Great Orion Nebula one last time before it is too late. Also, make sure to check out everyone's latest posts in Groups.io, we have had a lot of nice pictures lately, the Sunset, a Horsehead, a Luna X, the Nova & some Meteors from Liam's All Sky camera. Thanks for sharing your accomplishments everyone! I look forward to seeing everyone on the 25th for our Virtual General Meeting. Clear skies!

## Secretary's Report

*by Cheri Grissom*

### FAAC General Meeting – February 25, 2021

Our videoconference meeting was called to order by President Mike Bruno at 7:20 p.m. All board members present except Ed Halash. A total of 23 people were listed as being in attendance. New members and guests introduced themselves.

## 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

## Member Observing Experiences:

This time of year, members have been considering themselves lucky if they are able to observe the moon or the sun for a short time! Spring is on its way, and hopefully, we will have more to report soon.

## What's Up:

Gordon Hansen gave the presentation. Daylight Savings Time begins on March 14. The Vernal Equinox and first day of Spring is March 20. Our asterism of the month is the Sickle, which is found in the constellation of Leo and comprises the head and neck of the lion. For those who may not know, an asterism is a popular grouping of stars having an obvious shape. They usually are contained within a constellation. The constellation of Leo is also a place to find many galaxies in the spring sky, sometimes multiples in the same field of view. March is the month when many amateur astronomers in northern latitudes will pursue the Messier Marathon. At this time of year, it is possible to see all of the Messier objects in a single night.

## Club Reports:

Arica Flores gave our treasurer's report. We have had very few expenses for a long time, and our current balance is \$10,260. Liam Finn gave the website/social media report. He will be doing an update to the website this weekend. Hopefully, we will be starting to schedule events soon, and he will make sure the online calendars contain the information. Doug Bauer gave a membership report. He will make one last phone call to the several members who have not yet renewed. Mike reminded us there is still time to get your nomination in for the Sirius Award.

## Speaker:

John McGill is a long-time FAAC member and editor/photojournalist of "Astronomy for Everyone," the club's YouTube channel. He is also a NASA/JPL Solar System Ambassador and a credentialed launch photographer with the Kennedy Space Center. John spoke about the Mars Perseverance Mission, which had a thrilling and successful landing on the planet one week ago today. John was present at the launch of this mission on July 30, 2020.

John went over a brief history of our exploration of Mars. Way back in 1976, NASA's Viking I was the first craft to successfully land on the planet and send back photos from the surface. Curiosity was the last Mars rover to land on the planet (2012), and John talked about the many mechanical

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](https://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

and technological advancements in Perseverance. The science objectives of Perseverance include studying the geology and astrobiology of the planet, as well as doing sample caching for later retrieval by another mission, and testing technology for future human exploration. Perseverance also brought with it a small helicopter (1.8 kilograms) named Ingenuity which is intended to make the first powered flight on another planet.

Perseverance has landed near the edge of Jezero Crater, which scientists believe was filled with water in the past, and the exact landing site is believed to be an ancient river delta. The site was chosen for its potential of containing signs of ancient microbial life. The mission is scheduled to last two earth years. John shared a number of photos and videos, including some amazing close-ups of the actual launch.

A question-and-answer period followed. The meeting adjourned at approximately 9:55 p.m.

## Board Meeting – March 4, 2021

(Videoconference meeting.) All board members present. Eight additional members attended.

The prime topics of discussion at this month's board meeting concerned the club's outreach events, which are seriously curtailed due to the Covid precautions. We talked about what types of events would be possible, including live virtual solar events for daytime, participation in the Science Olympiad, and the possibility of a virtual "telescopes for beginners" type of event. We also talked about the club's mentorship program and how to encourage new members to use it, and also the possibility of hosting a monthly virtual Beginner's Night on the first Saturday of each month at 7 p.m. Keep an eye on "StarStuff" or any of our social media calendars for the latest information.

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).

# Watch the Lion: Celestial Wonders in Leo

*by David Prosper*



Leo is a prominent sight for stargazers in April. Its famous sickle, punctuated by the bright star Regulus, draws many a beginning stargazer's eyes, inviting deeper looks into some of Leo's celestial delights, including a great double star and a famous galactic trio.

Leo's distinctive forward sickle, or "reverse question mark," is easy to spot as it climbs the skies in the southeast after sunset. If you are having a difficult time spotting the sickle, look for bright Sirius and Procyon - featured in last month's article - and complete a triangle by drawing two lines to the east, joining at the bright star Regulus, the "period" in the reverse question mark. Trailing them is a trio of bright stars forming an isosceles triangle, the brightest star in that formation named Denebola. Connecting these two patterns together forms the constellation of Leo the Lion, with the forward-facing sickle being the lion's head and mane, and the rear triangle its hindquarters. Can you see this mighty feline? It might help to imagine Leo proudly sitting up and staring straight ahead, like a celestial Sphinx.

If you peer deeper into Leo with a small telescope or binoculars, you'll find a notable double star! Look in the sickle of Leo for its second-brightest star, Algieba - also called Gamma Leonis. This star splits into two bright yellow stars with even a small magnification - you can make this "split" with binoculars, but it's more apparent with a telescope. Compare the color and intensity of these two stars - do you notice any differences? There are other multiple star systems in Leo - spend a few minutes scanning with your instrument of choice, and see what you discover.

One of the most famous sights in Leo is the "Leo Triplet": three galaxies that appear to be close together. They are indeed gravitationally bound to one another, around 30 million light years away! You'll need a telescope to spot them, and use an eyepiece with a wide field of view to see all three galaxies at once! Look below the star Chertan to find these galaxies. Compare and contrast the appearance of each galaxy - while they are all spiral galaxies, each one is tilted at different angles to our point of view! Do they all look like spiral galaxies to you?

*Cont'd on page 6*

## 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
April	17th	7:17pm	Island Lake
May	15th Int'l Astronomy Day	7:48pm	Island Lake
June	19th	8:12pm	Island Lake
July	17th	8:06pm	Island Lake
August	14th	7:35pm	Island Lake
September	11th (Tentative)	6:49pm	Island Lake
October	9th	6:00pm	Maybury State Park

## Upcoming Club Meeting Topics & Speakers

Meeting	Speaker	Topic
March 25th	Andy Macica	Exploring the Universe with Astrophotography
April 22nd	Don Klaser	Skylore & Mythology
May 27th	Jeffery (Buddy) Stark	
June 24th	Elinor Gates	What's Up at Lick Observatory
July 22nd	Dr. Rajib Ganguly	The Universe Through Superman's Eyes

## March Talk Details

### Exploring the Universe with Astrophotography

*Andrew Macica*

*Public Programs Telescope Operator at Lick Observatory*

Andy will describe how he imaged the recent Jupiter/Saturn conjunction — during the daytime in broad daylight. It is a variation on planetary imaging that he has not seen done elsewhere. Because it was a recent project, it was done using current equipment available to anyone today. He will also discuss the software and image processing he used.

*Cont'd on page 6*



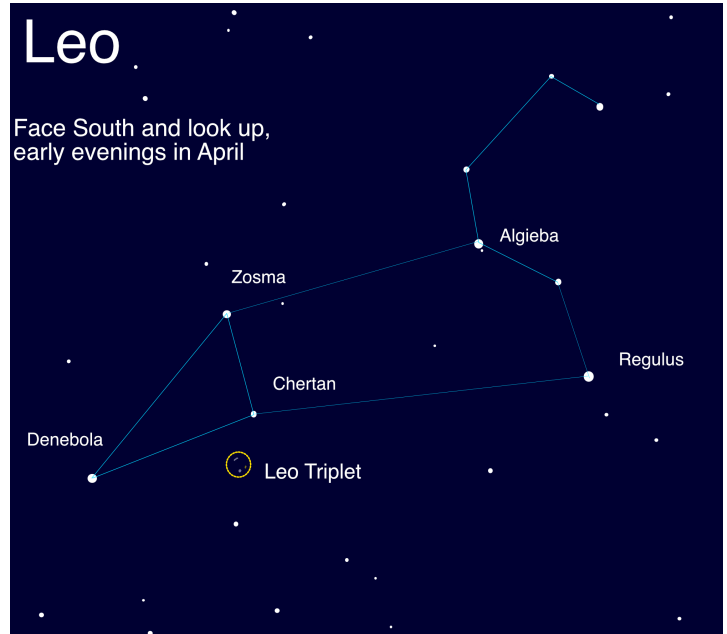
*Sirius and Procyon (Cont'd from page 4)*

April is Citizen Science Month, and there are some fun Leo-related activities you can participate in! If you enjoy comparing the Triplets, the “Galaxy Zoo” project ([galaxyzoo.org](http://galaxyzoo.org)) could use your eyes to help classify different galaxies from sky survey data! Looking at Leo itself can even help measure light pollution: the Globe at Night project ([globeatnight.org](http://globeatnight.org)) uses Leo as their target constellation for sky quality observations from the Northern Hemisphere for their April campaign, running from April 3-12. Find and participate in many more NASA community science programs at [science.nasa.gov/citizenscience](http://science.nasa.gov/citizenscience). Happy observing!



*Your view of the three galaxies in the Leo Triplet won't look as amazing as this image taken by the VLT Survey Telescope, unless you have a telescope with a mirror 8 feet or more in diameter! Still, even a small telescope will help your eyes pick up these three galaxies as “faint fuzzies”: objects that seem blurry against a background of pinpoint stars. Let your eyes relax and experiment with observing these galaxies by looking slightly away from them, instead of looking directly at them; this is called averted vision, a handy technique that can help you see details in fainter, more nebulous objects.*

*Image Credit: ESO, INAF-VST, OmegaCAM;  
Acknowledgement: OmegaCen, Astro-WISE, Kapteyn I.*



*The stars of Leo: note that you may see more or less stars, depending on your sky quality. The brightness of the Leo Triplet has been exaggerated for the purposes of the illustration - you can't see them with your unaided eye.*

*March Talk (Cont'd from page 5)***Bio:**

Andy is an Imaging Science Engineer with 30+ years Astronomical Observing, 20 years Astrophotography, 20 years as a volunteer for Lick Observatory, 5 years as a 36" Great Refractor Telescope Operator and 2 years as staff at Lick Observatory.

Andy's astrophotography work includes Hypersensitized Film Photography, CCD Imaging, Planetary Imaging (video), Spectroscopy, H-alpha and Calcium-K Solar Imaging. Andy detected a transiting exoplanet around HD209458 and performed Nova searches in M31.

## 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 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
<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