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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

2024 Solar Eclipse – Where will you be?

To begin, my interest in astronomy began in 2017 with the great American Eclipse. I went to Sweetwater Tennessee for the eclipse with my new telescope and filter to view the event. FYI, I knew nothing about astronomy or, as I soon realized, how to use my scope. The first thing I learned about astronomy; the people are awesome. Someone came over and was able to get my scope set on the sun as well as show me how to stay on target. Then, I was off and running sharing my scope with those around me. I met people from all over the country and started a new hobby that continues to teach and show me new, interesting, and amazing things.

I hope some of you were able to see or watch video of the eclipse that was viewable from Australia this month. Ken Bertin, last months speaker shared photos and videos of this on his Facebook page, as well as a link to watch while it was happening which I know I enjoyed. With the annular solar eclipse happening on October 14, 2023 and the Total Solar eclipse on April 8th 2024, I thought it would be a good time to ask, where will you be? Here in Michigan, we will have a partial eclipse, with totality being as close as Cleveland. Spring is finally here with May around the corner, so here's to no clouds! Now as we get closer to the event it is time to start thinking about where will you be? I am looking forward to seeing some discussions about this event soon.

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

Secretary's Report

by Jesse Godsey

FAAC General Meeting – April 23, 2023

Meeting called to order at 7:02 p.m. by president, Arica Flores. Treasurer, Joe Bostic, also present. VP, Ed Halash, and secretary, Jesse Godsey, were absent.. At Arica's request, Cheri Grissom filled in as secretary for the purpose of taking minutes. We had twenty-two members attending in person and seven online. Guests introduced themselves.

Member Observing Reports

The skies have not been favorable for observing over most of the past month, but several members reported nice views of the planetary conjunction of Venus and Jupiter.

What's Up in the Night Sky

Gordon Hansen reviewed our upcoming events, including the Swap Meet and Conference on April 1 and the Banquet on May 6. There are a couple of visible comets that are now past their peak, and one coming up that will be brightening in the fall. The annual Lyrid Meteor Shower peaks on April 23. Planets visible in the evening sky now are Mercury, Venus, Mars, Jupiter, Uranus, and in the morning, Saturn and Neptune. Mercury will be at its greatest elongation from the sun on the evening of April 11. Galaxy season is coming up!

Club Business

Get your banquet tickets soon! Seats are still available, but there is a limit to the number of people that can be accommodated at the venue. Our first Beginners' Night of the season will be April 29, at Island Lake State Recreation Area. We have an addition to our inventory of club equipment that will be available at certain outreach events. It is a 100mm Lunt hydrogen-alpha solar telescope. Special thank you to Tim Campbell for helping to make this possible.

Projects & Special Events

The club's annual banquet will be Saturday May 6 from 5pm to 10pm at Logan's Steakhouse, 13305 Eureka Road in Southgate. Banquet tickets are $35 per person and includes includes an soup or salad, entrée, side, and dessert. Non-alcoholic beverages are also included. Alcoholic beverages

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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.)

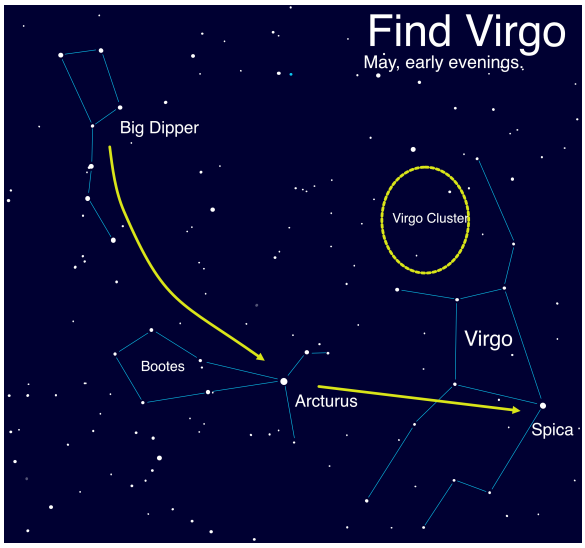
Observing nights & locations (scheduled and unscheduled as weather permits), equipment

Virgo's Galactic Harvest!

by David Prosper

May is a good month for fans of galaxies, since the constellation Virgo is up after sunset and for most of the night, following Leo across the night sky. Featured in some ancient societies as a goddess of agriculture and fertility, Virgo offers a bounty of galaxies as its celestial harvest for curious stargazers and professional astronomers alike.

Virgo is the second-largest constellation and largest in the Zodiac, and easily spotted once you know how to spot Spica, its brightest star. How can you find it? Look to the North and start with the Big Dipper! Follow the general curve of the Dipper's handle away from its "ladle" and towards the bright orange-red star Arcturus, in Boötes – and from there continue straight until you meet the next bright star, Spica! This particular star-hopping trick is summed up by the famous phrase, "arc to Arcturus, and spike to Spica."



Find Virgo by "arcing to Arcturus, then spiking on to Spica." Please note that in this illustration, the location of the Virgo Cluster is approximate - the borders are not exact.

This large constellation is home to the Virgo Cluster, a massive group of galaxies. While the individual stars in Virgo are a part of our own galaxy, known as the Milky Way, the Virgo Cluster's members exist far beyond our own galaxy's borders. Teeming with around 2,000 known members, this massive group of galaxies are all gravitationally bound to each other, and are themselves members of the even larger Virgo Supercluster of galaxies, a sort of "super-group" made up of groups of galaxies. Our own Milky Way is a member of the "Local Group" of galaxies, which in turn is also a member of the Virgo Supercluster! In a sense, when we gaze upon the galaxies of the Virgo Cluster, we are looking at some of our most distant cosmic neighbors. At an average distance of over 65 million light years away, the light from these galaxies first started towards our planet when the dinosaurs were enjoying their last moments as Earth's dominant land animals! Dark clear skies and a telescope with a mirror of

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.

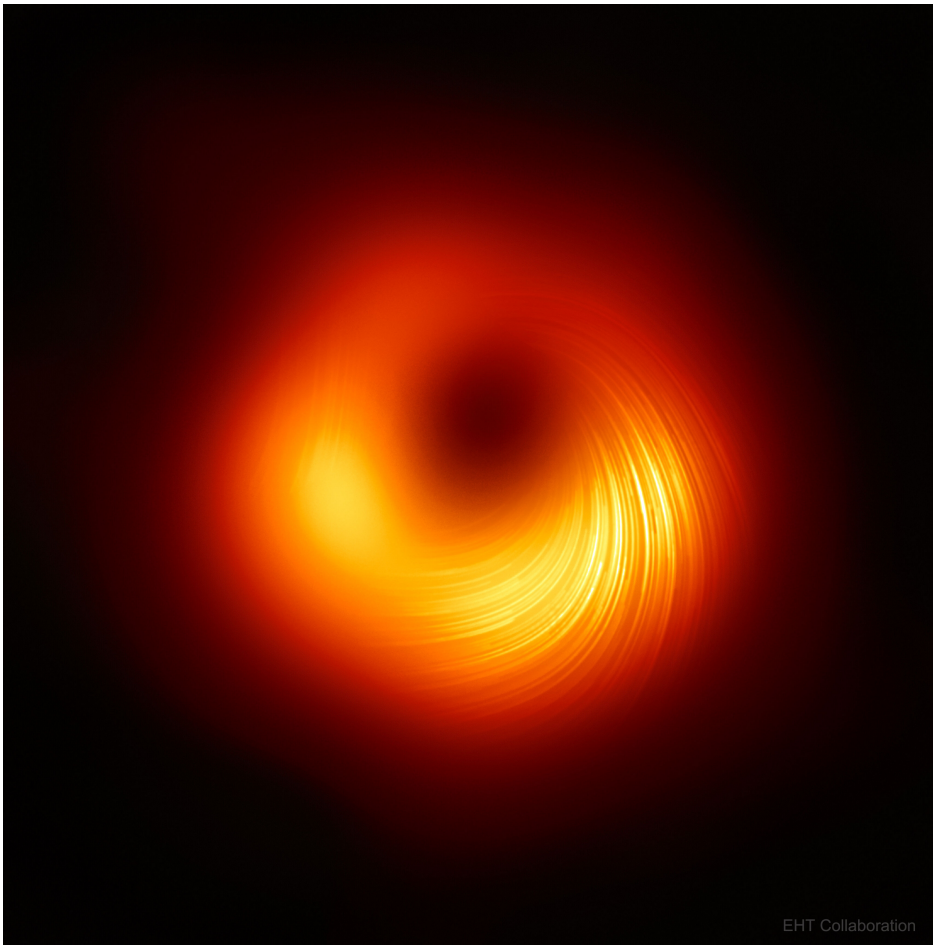
The observatory is adjacent to the athletic field situated between the Lincoln Park Middle School and High School buildings near

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).

six inches or more will reveal many of the cluster's brightest and largest members, and it lends itself well to stunning astrophotos.



The first image of a black hole's event horizon was taken in the center of one of the most prominent galaxies in Virgo, M87! This follow up image, created by further study of the EHT data, reveals polarization in the radiation around the black hole. Mapping the polarization unveils new insights into how matter flows around and into the black hole - and even hints at how some matter escapes! More details: apod.nasa.gov/apod/ap210331.html

Credit: Event Horizon Telescope Collaboration

Virgo is naturally host to numerous studies of galaxies and cosmological research, which have revealed much about the structure of our universe and the evolution of stars and galaxies. The "Universe of Galaxies" activity can help you visualize the scale of the universe, starting with our home in the Milky Way Galaxy before heading out to the Local Group, Virgo Cluster and well beyond! You can find it at bit.ly/universeofgalaxies. You can further explore the science of galaxies across the Universe, along with the latest discoveries and mission news, at nasa.gov.

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	29th	7:30pm	Spring Mill Pond
May	27th	8:59pm	Spring Mill Pond
June	24th	9:13pm	Spring Mill Pond
July	22nd	9:02pm	Spring Mill Pond
August	26th	8:17pm	Spring Mill Pond

Upcoming Club Meeting Topics & Speakers

Meeting	Speaker	Topic
April 27	Dennis Conti	Whacky World of Exoplanets
May 25	Thomas Drummond	Using the ISS to Engage in STEM
June 22	TBD	TBD
July 27	Michael Poxon	Tantrums in the Stellar Nursery
August 24	Andy Macica	Lick Historical Collections

March Talk Details

The Whacky World of Exoplanets and How We Discover Them

Dennis Conti, Chair, American Association of Variable Star Observers (AAVSO) Exoplanet Section

Exoplanets (planets outside our solar system) we now know come in all sizes, compositions, and orbital configurations around their host star. Some are even free floating! Although there are several theories, we still do not know for certain how most exoplanets were formed. What is certain, however, is that our overall knowledge of these distant and strange worlds has grown exponentially in the last few years and amateur astronomers have played a key role in their discovery. This presentation will review: the role exoplanet discoveries play in our quest for life outside our solar system, what some of the challenges are in discovering exoplanets, and how observations by amateur astronomers have been essential in making these discoveries.

Bio:

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Secretary's Report (Con't from Page 2)

are available but not included. Seating is limited, reserve seats for you and your better-half early!

Speaker

Ken Bertin is a hobbyist astronomer, past president, vice president, and currently lifetime member of the Warren Astronomical Society, with years of experience traveling to see astronomical events such as eclipses and transits. The topic of the presentation tonight was Edward Emerson Barnard (1857-1923) who is best known for his discovery of the proper motion of the star eventually named for him, Barnard's Star (six light years away). Ken talked about Barnard's personal and professional life experiences, his acquaintances and accomplishments.

Meeting adjourned at 9:07 p.m.

Speaker (Con't from Page 5)

Bio:

Dennis Conti is a retired telecommunications professional and an amateur astronomer with a strong interest in exoplanet research. In 2015, he founded the AAVSO's Exoplanet Section and has continued as section leader since. Dennis is also on the board of the AAVSO. Dennis has worked closely with the TESS Science Team to qualify AAVSO members as official participants in the TESS ground-based follow-up program, with over 26 AAVSO members now part of that program. He also developed the TESS submission guidelines and the software for detecting false positives, both of which have benefited the entire TESS team. Dennis is co-author of over 30 exoplanet discovery papers and has given presentations at numerous conferences and local astronomy clubs, as well as online exoplanet courses. For his contributions to TESS and other exoplanet activities, Dennis was awarded the American Astronomical Society's 2020 Chambliss Amateur Astronomy Achievement Award.

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
Telescopes	
TK1 Coronado Personal Solar Telescope (Doublestack) w/Meade Autostar Goto Mount	Jessica Edwards
TK5 4.5" Reflector on Fitz GEM mount	Jerry Jamula
TK6 8" Orion XT8i Dobsonian	Dan Smith
TK7 TPO 8" f/4 Newtownian Astrograph (OTA Only - no mount)	Bhru Patel
TK8 20" f/5 Obsession Dob, Ladder & EP Kit	Liam Finn
Presentation Tools	
Projector (older)	Jim Frisbie
Projector (newer)	Gordon Hansen
Projection Screen 8'	John McGill
Projection Screen 6'	Liam Finn
Bullhorn	George Korody
Speaker System w/Wireless Mic	Liam Finn

Item	Held by
Display Items	
Astronomy Event Sign (3' x 6')	Gordon Hansen
Astronomy Event Signs 18x24" (x8)	Liam Finn
PVC Display Board - Folding	Sandra Macika
Banner - Small (24" x 32")	George Korody
Banner - Medium (24" x 72")	Sandra Macika
Banner - Large (32" x 16')	George Korody
Tri-Fold Presentation Boards	George Korody
Other	
Canopy (10' x 10')	Liam Finn
Pop Cooler	Sean Pickard
TA Sky Quality Meter	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