



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.

President's Corner

by Mike Bruno

An Eclipse, a transit and a Hangout. June has been a busy month. The month started off with another Virtual Astronomy event, if you missed it just go to the Astronomy for Everyone YouTube channel and you can find the stream from June 5th. Tim Campbell along with Tim Dey opened the Hector J Robinson Observatory at Lincoln Park High School and live streamed with the C14 for the evening. Thanks to Liam & John & everyone else for making this another virtual success.

We had some nice pictures of the sunrise partial solar eclipse from June 10th shared on the Groups.io chat and a solar transit of the ISS on June 17th. It's hard to believe it has been almost four years since the moon has at least partial covered the Sun. The next solar eclipse in North America will be an Annular solar eclipse on October 14, 2023, it's never too early to start planning for that event.

We will still meet this month virtually on June 24 at 7pm and you can find the link in Groups.io. Please join us and listen to Elinor Gates to discuss What's Up at Lick Observatory. I hope everyone can make it. Clear Skies!

Secretary's Report

by Cheri Grissom

FAAC General Meeting – May 27, 2021

Our videoconference meeting was called to order by President Mike Bruno at approximately 7:10 p.m. Board members Ed Halash, Arica Flores, and Cheri Grissom were absent. Cheri joined later. A total of 16 people attended. We had one guest who introduced himself.

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

Member Observing Experiences:

Our first members-only observing event held on May 14 at Island Lake was a success, with about ten members attending. Attendees received a free NASA calendar and enjoyed getting together in person for the first time in well over a year (following park Covid restrictions of course). Doug Bauer has been doing some solar observing and in the last few days, has seen some very nice prominences and sunspots.

What's Up:

Gordon Hansen presented. He went over our calendar of events, which can be accessed on our website or social media sites. Instead of a single asterism this month, Gordon reviewed the many popular ones to be seen in our skies in the coming summer months, including the Summer Triangle, Northern Cross, Big Dipper, Little Dipper, and more. On June 10, there will be an annular solar eclipse which, in Michigan, will be a partial eclipse and will happen very early, just about sunrise, and will be difficult to observe from most parts of our state, with the best views possibly in the UP. Evening planets for June are Venus and Mars, with Jupiter and Saturn rising after midnight.

Club Reports:

Club Equipment: Jeff Gorman reports that he has sent emails out to all of our equipment caretakers just today, asking them to verify that they are still in possession of the items, and he has already heard back from three, plus another one confirmed at tonight's meeting.

Secretary's Report: Cheri was absent for the business portion of this meeting but arrived in time for our guest speaker. She prepared these minutes based on the recording of the Zoom meeting. Thank you, Tim Campbell!

Treasurer's Report: Arica was absent but Mike reported that she has submitted the FERA report as required. We currently have a little over \$10,000 in our account.

Social Media/Website: Liam Finn advises that everything is up to date.

Tim Campbell attended the last GLAAC meeting. At the time of the meeting, it was felt that it was still too risky to make plans for any in-person events. Astronomy at the Beach will be planned as a virtual event for September 24 and 25, and GLAAC will have to wait and see if any in-person components might be possible.

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

Also, the Great Lakes Star Gaze will be held on September 9 through 12. As of right now, it is being planned with Covid restrictions similar to last year.

We want to have a second virtual Beginners' Night, tentatively on June 5. We will discuss this in detail at the upcoming board meeting. We also want to plan more members-only in-person viewing events. Watch for updates on Groups.io..

Speaker:

Jeffery (Buddy) Stark, manager of Longway Planetarium, in Flint, holds a master's degree in science education and is currently a PhD student at Western Michigan University. He has a research interest in scientific literacy among the general public.

He spoke tonight about Tycho Brahe (1546-1601), Danish nobleman and astronomer, and Johannes Kepler (1571-1630), a German astronomer and mathematician. Though they did not meet until the last two years of Brahe's life, their lives intersected in some interesting and important ways in the field of astronomy, and we learned about their relationship with one another, their very different approaches to science, and what they had in common. Each made significant contributions to the scientific understanding of astronomy during this important historical period.

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).

Observe the Milky Way and Great Rift

by David Prosper



Summer skies bring glorious views of our own Milky Way galaxy to observers blessed with dark skies. For many city dwellers, their first sight of the Milky Way comes during trips to rural areas - so if you are traveling away from city lights, do yourself a favor and look up!

To observe the Milky Way, you need clear, dark skies, and enough time to adapt your eyes to the dark. Photos of the Milky Way are breathtaking, but they usually show far more detail and color than the human eye can see - that's the beauty and quietly deceptive nature of long exposure photography. For Northern Hemisphere observers, the most prominent portion of the Milky Way rises in the southeast as marked by the constellations Scorpius and Sagittarius. Take note that, even in dark skies, the Milky Way isn't easily visible until it rises a bit above the horizon and the thick, turbulent air which obscures the view. The Milky Way is huge, but is also rather faint, and our eyes need time to truly adjust to the dark and see it in any detail. Try not to check your phone while you wait, as its light will reset your night vision. It's best to attempt to view the Milky Way when the Moon is at a new or crescent phase; you don't want the Moon's brilliant light washing out any potential views, especially since a full Moon is up all night.

Keeping your eyes dark adapted is especially important if you want to not only see the haze of the Milky Way, but also the dark lane cutting into that haze, stretching from the Summer Triangle to Sagittarius. This dark detail is known as the Great Rift, and is seen more readily in very dark skies, especially dark, dry skies found in high desert regions. What exactly is the Great Rift? You are looking at massive clouds of galactic dust lying between Earth and the interior of the Milky Way. Other "dark nebulae" of cosmic clouds pepper the Milky Way, including the famed Coalsack, found in the Southern Hemisphere constellation of Crux. Many cultures celebrate these dark clouds in their traditional stories along with the constellations and Milky Way.

Where exactly is our solar system within the Milky Way? Is there a way to get a sense of scale? The "Our Place in Our Galaxy" activity can help you do just that, with only birdseed, a coin, and your imagination:

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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 |
|-----------|------------------|--------|--------------------|
| July | 17th | 8:06pm | Island Lake |
| August | 14th | 7:00pm | Island Lake |
| September | 11th (Tentative) | 6:49pm | Island Lake |
| October | 5th | 6:00pm | Maybury State Park |

Upcoming Club Meeting Topics & Speakers

| Meeting | Speaker | Topic |
|-----------|-------------------|--------------------------------------|
| June 24th | Elinor Gates | What's Up at Lick Observatory |
| July 22nd | Dr. Rajib Ganguly | The Universe Through Superman's Eyes |

June Talk Details

What's Up at Lick Observatory

Dr. Elinor Gates

Staff Astronomer at Lick Observatory

Lick Observatory has a long history of being at the forefront of science and technology. Despite the COVID pandemic and the SCU Lightning Complex Fire we continued operations and introduced new telescopes and instruments, such as PANOSSETI and PEAS. I will give an overview of our research telescopes, how we persevered through the trials of 2020, and the exciting new research in progress, such as the search for extrasolar planets and extraterrestrial life.

Bio:

Dr. Elinor Gates is a staff astronomer at Lick Observatory specializing in laser guide star adaptive optics and near infrared camera instrumentation

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Milky Way (Cont'd from page 4)

bit.ly/galaxyplace. You can also discover the amazing science NASA is doing to understand our galaxy – and our place in it – at nasa.gov.



The Great Rift is shown in more detail in this photo of a portion of the Milky Way along with the bright stars of the Summer Triangle. You can see why it is also called the “Dark Rift.” Credit: NASA / A.Fujii!



If the Milky Way was shrunk down to the size of North America, our entire Solar System would be about the size of a quarter. At that scale, the North Star, Polaris – which is about 433 light years distant from us – would be 11 miles away! Find more ways to visualize these immense sizes with the Our Place in Our Galaxy activity: bit.ly/galaxyplace

June Talk (Cont'd from page 5)

and observations. She did her undergraduate studies, majoring in Mathematics and Astrophysics, at Mount Holyoke College. She received her Ph.D. in Physics/Astronomy from the University of New Mexico in 1998. Before moving to Lick Observatory, she worked at the Smithsonian Astrophysical Observatory, IAU Minor Planet Center, the National Radio Astronomy Observatory, and the Air Force Phillips Laboratory. Dr. Gates' current research interests are studying quasars and their host galaxies, discovering dust obscured quasars, and measuring the masses of quasar and AGN central black holes. Asteroid (2650) Elinor is named in Dr. Gates' honor.

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 |
