

# STAR STUFF <br> May 2013 - Vol. 23 No 5 

STAR STUFF is published eleven times each year by:
FORD AMATEUR ASTRONOMY CLUB P.O. Box 7527

Dearborn MI 48121-7527

| PRESIDENT: | Gordon Hansen |
| :--- | :--- |
| VIIE PRESIDENT: | Jon Blum |
| SECRETARY: | Doug Bauer |
| TREASURER: | Chuck Jones |
| WEBMASTER: | Greg Ozimek |
| NEWSLETTER EDITOR: | Jennifer Zdanowski |

## Club Information:

The Ford Amateur Astronomy Club(FAAC) meets on the fourth Thursday each month, except for the combined November/ December meeting on the first Thursday of December - at Henry Ford Community College Administration Services and Conference Center in Dearborn. Refer to our website for a map and directions (www.fordastronomyclub.com).

The FAAC observes at Spring Mill Pond within the Island Lake State Recreation Area near Brighton, Michigan. The club maintains an after-hours permit, and observes on Friday and Saturday nights, and nights before holidays, weather permitting. The FAAC also has use a private observing site near Gregory Michigan and lake Erie Metro Park. See the FAAC Yahoo Group* for more information.

Observing schedules and additional info are available on our website, or via the FAAC Yahoo Group.* Or call the FAAC Hotline, for info and leave a message, or ask questions: $313-757-2582$. or send email inquiries to info@fordastronomyclub.com.

Membership in the FAAC is open to anyone with an interest in amateur astronomy. The FAAC is an affiliate of the Ford Employees Recreation Association (F.E.R.A.). Membership fees:

Annual - New Members: \$30 (\$15 after July 1)
Annual - Renewal: $\quad \$ 25$ (\$30 after January 31)
Membership includes the STAR STUFF newsletter, discounts on magazines, discounts at selected area equipment retailers, and after-hours access to the Island Lake observing site.

Astronomy or Sky \& Telescope Magazine Discounts
Obtain the required form from the FAAC club treasurer for a $\$ 10$ discount. Send the completed form directly to the respective publisher with your subscriptions request and payment. Do not send any money directly to the FAAC for this.

## Star Stuff Newsletter Submissions

Your submissions to STAR STUFF are welcome! Send your story and/or images to the editor at jenzdanowski@yahoo.com Email text or MS Word is fine. STAR STUFF will usually go to press the weekend prior to each general meeting. Submissions received prior to the 15 th can be included in that issue.

* FAAC Members are welcome to join our Ford Astronomy Club Yahoo!Group. Messages photos, files, online discussions, and more! URL: groups.yahoo.com/group/FordAstronomyClub.

This months background photos of the moon Page 1 courtesy of John Kirchhoff. See more of John's photos at:
http://www.flickr.com/photos/ 33926475@N06/with/4311533997/

## President's Corner (continued from Page I)

Upcoming events for June:

June 14th - Summer Skies at Macomb Community College. Presentations and observing with the public. Telescopes are needed. More details to follow - contact Bob MacFarland if you can participate.

June 15th - Beginner's Night (at our normal Island Lake location.)

# Astro Imaging SIG 

Gordon Hansen

All are invited to join us in the Astro Imaging SIG meetings, to share and discuss images, experiences, and techniques.

We always have a good time, with lively discussion, and sharing of valuable information.
Next meeting is June 13th. The meeting room location - HFCC Admin. Services and Conference Center (same building), Berry Amphitheater Auditorium.
Topics invited. Pizza served.



The image shows the configuration of Mercury, Venus, and Jupiter in the western sky just after sunset on May 26, 2013. Insets show the relative size appearance of the planets on that date.

## Triple Treat

by Dr. Ethan Siegel
The solar system is a busy place, with five wandering planets visible to the naked eye alone. When any two pass close by each other from our point of view, we see an astronomical conjunction, but on very rare occasions, three planets will find themselves grouped together: a triple conjunction. Towards the end of May, Mercury, Venus and Jupiter will treat us to the best triple conjunction in years.

On May 25th, Mercury will pass within $1.4^{\circ}$ of Venus, then two days later Mercury comes within $2.4^{\circ}$ of Jupiter, and finally on the 28th, Jupiter and Venus approach within $1^{\circ}$ of one another. If it weren't for the slight orbital tilt of our solar system's planetary orbits, these conjunctions would all be occultations instead. During the nights of May 26th-27th, all three planets are visible immediately after sunset within the same $3^{\circ}$ field of view, with the triple conjunction peaking in a triangular shape on the 26th. (For scale, the full Moon subtends about $1 / 2^{\circ}$.) The three planets appear close together for a few days more, making a line in the sky on the 30th/ 31st.

How does this happen? Mercury and Venus race around the Sun far faster than Earth, with Mercury completing more than four revolutions around the Sun for each one that Earth makes. At the same time, Jupiter is far slower, taking 12 years to orbit just once around the Sun. Jupiter's been high in the sky during the early parts of the night, but steadily lowers throughout May as Earth continues to move away from it, approaching its maximum distance from Earth. Mercury and Venus, meanwhile, begin to move
out from behind the Sun during May: Venus at the beginning of the month and Mercury in the middle.

Thus, during this triple conjunction, all three planets will be on the far side of the Sun, something that happens just $25 \%$ of the time in triple conjunctions involving Mercury and Venus! If you telescopically resolve these planets into disks, you'll see our inner worlds in a nearly-full gibbous phase. Jupiter will appear largest in terms of angular diameter, followed by Venus and lastly by Mercury. Just a year ago, during its now-famous transit, Venus took up more than a full arc-minute in the sky; during this conjunction, it will just one-sixth that angular size and less than a third the apparent diameter of Jupiter. Nevertheless, Venus will still be more than six times as bright as Jupiter during this time, outshining all night-sky objects other than the Moon. Closer conjunctions of two naked-eye planets are frequent, but getting three or more like this happens just once or twice per decade, so don't miss your chance to see it.

And speaking of occultations, The Space Place has a great kid-friendly explanation of the Venus transit and solar eclipses of 2012 at spaceplace.nasa.gov/venus-transit.

Dr. Ethan Siegel, a theoretical astrophysicist, is a professor at the University of Portland (OR) and Lewis \& Clark College.

This article was provided through the courtesy of the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.

## Treasurer's Report <br> May 6, 2013 <br> By Chuck Jones

## Ford AmateurAstronomy Club <br> Balance Sheet <br> As of May 6, 2013

May 6, 13

| ASSETS |  |
| :---: | :---: |
|  |  |
| Current Assets |  |
| Checking/Savings |  |
| CD 200599272 | 1,057.39 |
| CD 205196033 | 1,002.32 |
| CD 89265268 | 1,103.67 |
| Checking | 2,337.38 |
| FAAC Savings |  |
| Equipment | 1,339.08 |
| Scholarship | 349.06 |
| Total FAAC Savings | 1,688.14 |
| Petty Cash Account | 92.99 |
| Total Checking/Savings | 7,281.89 |
| Other Current Assets GLAAC | 3,041.29 |
| Total Other Current Assets | 3,041.29 |
| Total Current Assets | 10,323.18 |
| TOTAL ASSETS | 10,323.18 |
| LIABILITIES \& EQUITY | 0.00 |

## Club Wear

You can order online from LL Bean, using the instructions contained in a file that you can view on our club Yahoo Group website Club Wear file folder at
http://tech.groups.yahoo.com/group/ FordAstronomyClub/files/Club\%20Ware/

Meeting Agenda - May 23rd
HFCC - Berry Auditorium -Admin. Services \&
Conference Center www.fordastronomyclub.com
5:30
Opening/Introduction/Member Observing
Main Presentation:
Dark Matter Terry Swift

Tech Talks:
LX200 Experience
Club Projects/Committees/Member Support
Club Business/Secretary/Treasurer/Equipment Reports

## Member Photos



Above, photo taken by Brian Kutscher of Comet PanSTARRS on March 14th at 8:34 pm from "The Hill" in Allen Park, MI. It was made with a Canon EOS 30D digital camera, fitted with a70-300 mm Canon zoom lens, set at 300 mm . It was a single five second exposure, with the lens set at $f / 5.6$. Because the Canon 30D is not a full frame sensor camera, the effective focal length of the lens is 500 mm . Because the image is cropped, the field of view is about what a very "fast" 875 mm lens would show to a viewer. The camera was piggyback mounted on an 8 inch Celestron telescope with an Orion equatorial mount, which kept the camera pointed at the target for the five second exposure.

## FAAC General Meeting Minutes April 25th, 2013

By Jim Frisbie

## Opening:

The meeting was called to order in the Berry Auditorium at 5:30 pm by President, Gordon H. All attendees introduced themselves. Gordon H. welcomed new members and guests. Tim D. introduced the Superintendent of Lincoln Park Schools who accepted a $\$ 100$ Donation from FAAC to purchase an AutoGuider for HJRO. John S. was welcomed to the General Meeting after a prolonged illness.

## Observing Experiences:

Tim C. talked about observing Jupiter, Pleiades, and the Orion Nebula. Jon B. discussed Astronomy activities at the Michigan Science Center. Greg K. announced the Messier Marathon planned for HJRO. Stephen U. reviewed variable star observing experiences.

## Whats Up in May?

President Gordon H. presented interesting objects for viewing in May

## Business Meeting:

- Secretary's Report in Star Stuff - Approved
- Treasurers Report in Star Stuff - Approved
- SWAP Meet was discussed. Best Ever! with $\$ 782$ profit
- The Club received a thank you from the 7 Ponds Club for participation in their recent event.


## Projects and Events:

- May 4, 6 pm-?: FAAC Banquet, at Karls' Kabin, (See flyer on Club sites).
- May 5: Sean FitzGerald's Memorial at the Gaelic League in Detroit
- May 10 \& 11: Point Crescent State Park in the Thumb *CANCELLED*
- May 18: Beginner's Night Skies Over Lake Erie
- June 15: Beginner's Night at Island Lake

George \& Pat Korody requested prize donations to be presented at the Club Banquet.
Business meeting closed at 6:30 pm and group moved to the Planetarium.

## Main Program:

- StarFest 2012 by Dr. Dale P.
- Planetarium Software Overview by George K.
- Tellus Museum in Georgia by Frank A.

The meeting was adjourned by President, Gordon H. at 7:35 pm.

FAAC Equipment List 4-10-13 provided by Dennis Salliotte

| Item | Currently Held By: | Date Last Verified |
| :---: | :---: | :---: |
| Telescopes |  |  |
| 4" Dobsonian | George Korody | 2/7/13 |
| $41 / 2$ " Galileo Alt/Az Reflector | James French | 4/10/13 |
| 8" Orion 8XTi Dobsonian | Matthew Kehoe | 4/3/13 |
| 4" Donated Reflector in need of repair | George Korody | 4/4/13 |
| Presentation Tools |  |  |
| Projector | George Korody | 5/9/13 |
| Projection Screen $8^{\prime}$ | Bob MacFarland | 5/2/13 |
| Speaker System w/wireless mic | Bob MacFarland | 3/12/13 |
| Bullhorn | Gordon Hansen | 4/10/13 |
| DVD Player | Gordon Hansen | 4/10/13 |
| Projection Screen 6' | Gordon Hansen | 5/2/13 |
| Demonstration Tools |  |  |
| Weight On Planets Scale | George Korody | 2/7/13 |
| Lunar Phase Kit | Bob MacFarland | 3/12/13 |
| 100 ft Scale Model Solar System Kit | Bob MacFarland | 3/12/13 |


| Display Items |  |  |
| :--- | :---: | :---: |
|  |  |  |
| Astronomy Event Sign (3' X 6') | Gordon Hansen | $4 / 10 / 13$ |
| PVC Display Board - Folding | Bob MacFarland | $4 / 4 / 13$ |
| Banner - Large (32" X 16') | Doug Bauer | $5 / 2 / 13$ |
| Banner - Medium (24" X 48") | Doug Bauer | $5 / 2 / 13$ |
| Banner - Small (24" X 32") | George Korody | $5 / 2 / 13$ |
| Tri-Fold Presentation Boards | Don Klaser | $3 / 13 / 13$ |
| Tri-Fold Poster Board (Early <br> Club Photos) | George Korody | $2 / 7 / 13$ |


| Other |  |  |
| :--- | :---: | :---: |
| Sky Quality Meter | Syed Saifullah | $3 / 8 / 13$ |
| Canopy (10' X 10') | Greg Ozimek | $5 / 10 / 13$ |
| Equipment Etching Tool | Dennis Salliotte | $5 / 15 / 13$ |
| Pop Cooler | Michael Dolsen | $4 / 25 / 13$ |

Ford Amateur Astronomy Club
Star Stuff Newsletter
P.O. Box 7527

Dearborn MI 48121-7527


