



Volume 23, Number 1

January 2013

## In This Issue

### Page One

#### The Art Of Space Imagery

#### President's Corner

#### Inside Stuff

#### 4 Treasurers Report

#### 4 Classifieds

#### 4 Meeting Agenda

#### 5 Astro-Imaging SIG

#### 6 FAAC Meeting Minutes - August 23, 2012

## The Art of Space Imagery

by Diane K. Fisher

When you see spectacular space images taken in infrared light by the Spitzer Space Telescope and other non-visible-light telescopes, you may wonder where those beautiful colors came from? After all, if the telescopes were recording infrared or ultraviolet light, we wouldn't see anything at all. So are the images "colorized" or "false colored"?

No, not really. The colors are translated. Just as a foreign language can be translated into our native language, an image made with light that falls outside the range of our seeing can be "translated" into colors we can see. Scientists process these images so they can not only see them, but they can also tease out all sorts of information the light can reveal. For example, wisely done color translation can reveal relative temperatures of stars, dust, and gas in the images, and show fine structural details of galaxies and nebulae.

*(continued on Page 3)*

## President's Corner

By Gordon Hansen

Happy New Year! 2013 arrived despite the Mayan's b'ak'tun coming to an end on December 21st. Don't you just hate it when prophecies don't come true. Well, at least we have Mars appearing as big as the moon this August to look forward to.

The club's calendar once again kicks off with a day of out-reach and observing at Lake Erie Metropark's Ice Daze on the 19th of January. Not sure if you'll see this before or after the event, but, come out and join us if you can. Once again we will break for dinner at the nearby Three Hermano's for some great south of the border food.

Please try and make it to this month's club meeting on the 24th. Elections for this year's officers will occur. The floor will be open for nominations to any office prior to the election.

*(continued on Page 2)*

# STAR STUFF

## January 2013 - Vol. 23 No 1

STAR STUFF is published eleven times each year by:

**FORD AMATEUR ASTRONOMY CLUB**  
P.O. Box 7527  
Dearborn MI 48121-7527

PRESIDENT: Gordon Hansen  
VICE 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](http://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](mailto: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: \$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](mailto: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 15th 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](http://groups.yahoo.com/group/FordAstronomyClub).

## President's Corner

(continued from Page 1)

Nominations are still being accepted for the 2013 Sirius Award. You have till January 31st to nominate a bright star in the club. Once again, please forward any nominations to me at [President@fordastronomyclub.com](mailto:President@fordastronomyclub.com). Please include a brief summary of why the person should receive the award. The recipient will receive the award at the club banquet on May 4th.

The board started putting dates together for our Beginner's Nights this summer. We're also considering starting a series of club observing sessions at some dark sky sites this year. These sessions would be scheduled near the new moon, and may rotate to different locations each month. Lake Hudson State Park, Port Crescent State Park, Richmond Airfield, and Gladwin ( the site of the Great Lakes Star Gaze) are potential sites. Some of these are far enough that camping could be involved. We would welcome any input you have on this initiative, especially on how far you would be willing to travel.

Dates that have been finalized for 2013:

- Saturday, March 16th – Annual Expo & Swap Meet
- Saturday, May 4th – Club banquet

I'm looking forward to a year of CLEAR SKIES!

*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/>



*This image of M101 combines images from four different telescopes, each detecting a different part of the spectrum. Red indicates infrared information from Spitzer's 24-micron detector, and shows the cool dust in the galaxy. Yellow shows the visible starlight from the Hubble telescope. Cyan is ultraviolet light from the Galaxy Evolution Explorer space telescope, which shows the hottest and youngest stars. And magenta is X-ray energy detected by the Chandra X-ray Observatory, indicating incredibly hot activity, like accretion*

## The Art of Imagery

*(continued from Page 1)*

Spitzer's Infrared Array Camera (IRAC), for example, is a four-channel camera, meaning that it has four different detector arrays, each measuring light at one particular wavelength. Each image from each detector array resembles a grayscale image, because the entire detector array is responding to only one wavelength of light. However, the relative brightness will vary across the array.

So, starting with one detector array, the first step is to determine what is the brightest thing and the darkest thing in the image. Software is used to pick out this dynamic range and to re-compute the value of each pixel. This process produces a grey-scale image. At the end of this process, for Spitzer, we will have four grayscale images, one for each of the four IRAC detectors.

Matter of different temperatures emit different wavelengths of light. A cool object emits longer wavelengths (lower energies) of light than a warmer object. So, for each scene, we will see four grayscale images, each of them different.

Normally, the three primary colors are assigned to these gray-scale images based on the order they appear in the spectrum, with blue assigned to the shortest wavelength, and red to the longest. In the case of Spitzer, with four wavelengths to represent, a secondary color is chosen, such as yellow. So images that combine all four of the IRAC's infrared detectors are remapped into red, yellow, green, and blue wavelengths in the visible part of the spectrum.

Download a new Spitzer poster of the center of the Milky Way. On the back is a more complete and colorfully-illustrated explanation of the "art of space imagery." Go to [spaceplace.nasa.gov/posters/#milky-way](http://spaceplace.nasa.gov/posters/#milky-way).

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

## Treasurer's Report January 8, 2013

By Chuck Jones

### Ford Amateur Astronomy Club Balance Sheet

As of January 8, 2013

	Jan 8, 13
<b>ASSETS</b>	
Current Assets	
Checking/Savings	
CD 200599272	1,056.33
CD 205196033	1,001.32
CD 89265268	1,102.02
Checking	606.51
FAAC Savings	
Equipment	1,186.97
Scholarship	262.06
Total FAAC Savings	1,449.03
Petty Cash Account	112.20
Total Checking/Savings	5,327.41
Other Current Assets	
GLAAC	1,563.35
Total Other Current Ass...	1,563.35
Total Current Assets	6,890.76
<b>TOTAL ASSETS</b>	<b>6,890.76</b>
<b>LIABILITIES &amp; EQUITY</b>	<b>0.00</b>

### Club Wear

You can purchase clothing with our FAAC club logo on it from either one of two sources. You can buy from Diane Worth, by calling her at 248-980-7832. Or 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 - January 24th

HFCC – Berry Auditorium -Admin. Services & Conference Center [www.fordastronomyclub.com](http://www.fordastronomyclub.com)  
5:30

### Opening/Introduction/Member Observing

#### Main Presentation:

A funny thing happened Matthew Linke

### Club Projects/Committees/Member Support

### Club Business/Secretary/Treasurer/Equipment Reports

Election of Officers Doug Bock

## Items For Sale

Up for sale is my recently acquired Orion Starblast 6. I bought it off Astromart a few months ago, and it is in truly like-new condition. I have only had a couple opportunities to take it out and it performs well. I have one too many scopes and this one is overshadowed by my 8" dob. Scope comes with dust cover and red dot finder, but no eyepieces. Retails for \$279 currently plus \$30 s/h.

### PRICED TO SELL: \$175

Pictures are posted here:

<http://groups.yahoo.com/group/FordAstronomyClub/photos/album/982235276/pic/list>

Contact Syed at: (734) 945-5162 if interested or e-mail me.



## 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 **February 14th**. The meeting room location – HFCC Admin. Services and Conference Center (same building), Berry Amphitheater Auditorium.

Topics invited. Pizza served.

## FAAC Events 2013

**February 14th - SIG Meeting-Berry  
Amphitheater Auditorium (HFCC)**

**February 28th - General Club Meeting -Berry  
Amphitheater Auditorium (HFCC)**

**Saturday, March 16th – Annual Expo & Swap  
Meet**

**Saturday, May 4th – Club banquet**

*Background Photo from Lunt Solar Scope Image taken at the  
Hector J Robinson Observatory, June 28, 2010*

## One FAAC members blog

<http://hjrobservatory.blogspot.com/>

A few updates on the observatory, quick articles and photos. I'll try to improve my writing on this blog. Also, I try to keep daily updates on this blog. - Greg Knekleian, HJRO volunteer.

## Items For Sale

*(continued from page 5)*

- 8 inch Zhumell Dobsonian Telescope
- F/5
- 2 inch Crawford low profile focuser with 1.25 inch adapter.
- 26 mm 2 inch eyepiece and 9 mm 1.25 inch eyepice
- 8 x 50 right angle finderscope
- Laser Collimator
- cooling fan with battery pack
- 2 " and 1.25" eyepiece rack and glow-in-the-dark tape on bearing box.
- Extras Include: Desert Storm Shield, padded carrying case for optical tube, Telrad
- \$300 Firm Call John 248-538-1514 or email to [ka8grh@gmail.com](mailto:ka8grh@gmail.com)

**REMINDER: FAAC membership renewals are due by January 31, 2013.**

The January FAAC General Meeting is the last meeting where you can renew your membership for \$25. After January 31st the renewal will cost \$30, so save yourself \$5 and bring your checkbook or cash to the January 24th FAAC General Meeting.

- Annual–New Member: \$30
- Annual–Renewal: \$25 (\$30 after Jan 31)

Send your check for \$25 to:

FAAC  
P.O. Box 7527  
Dearborn, MI 48121-7527

Or bring your money to the FAAC General Meeting at 5:30 PM in the Berry Amphitheater Auditorium in the Administrative Services and Conference Center on the campus of Henry Ford Community College.

Membership includes the STAR STUFF newsletter, discounts on magazines, discounts at selected area equipment retailers, and after-hours access to the Island Lake and Lake Erie Metropark observing sites, use of the FAAC Yahoo Group, and mentoring program.

# FAAC General Meeting Minutes December 6th, 2012

By Doug Bauer Secretary

President Gordon Hansen opened the meeting at 5:30 pm. 54 attendees were present. After introductions, the following members shared their observing experiences:

- Mo Mroue traveled to New York and visited the Hayden Planetarium and to Chicago and visited the Adler Planetarium.
- George Korody mentioned a spectacular solar prominence.
- Bob MacFarland observed Jupiter with Ganymede transiting.
- Dennis Salliotte reminded us that the HFCC Planetarium is now open for public shows. They recently did a planetarium show and solar observing event for some autistic students. He asked that anyone interested in learning to run the HFCC Planetarium contact one of the FAAC member that currently run the HFCC planetarium shows (Dennis Salliotte, Bob Clubb, Tim Campbell, or Bob Fitzgerald).
- Doug Bauer mentioned an Outreach Event that he and Bob MacFarland did at St Elizabeth Seton Church for Homeless people that were being hosted at the church

Presentation - Henry Ford Community College Astronomy Club - Marissa Villaneuva

- Currently has 20 active members with 50 on Facebook
- Meet every Thursday at 4:00 PM in room S-042 in the HFCC Science Building
- Many Events:
- Hector J. Robinson Observatory (in Lincoln Park) session
- Trip to Chicago visited the Adler Planetarium and Fermi Lab
- Great Lakes Star Gaze in Gladwin
- Sidewalk Astronomy
- Future Plans:
- Become Members of Night Sky Network
- Get Banners, Logo, Name Tags
- Lectures

What's Up in the Night Sky (December) - John Schroer

- Michigan Science center is opening in Detroit Dec 26 - Jan 6th and every weekend in January and then permanently Wednesdays through Sunday from January 30th. Any FAAC members

wishing to do solar observing at the Michigan Science Center during days when it is open should contact John Schroer.

- In the Sky in December:
  - Dec 28 - Full Moon
  - Dec 20 - First Q Moon
  - Dec 13 - New Moon
  - Dec 6 - Last Q Moon
  - Jupiter in Taurus
  - Dec 13/14 - Geminids Meteor Shower best after midnight
  - Ceres and Vesta visible
  - Uranus in Pisces
  - Dec 8th Moon, Spica, Saturn, Venus and Mercury are all visible in just before sunrise
  - Dec 11th Venus and Mercury and Crescent Moon
- In the Sky in January
  - Jan 4 - Last Q Moon
  - Jan 11 - New Moon
  - Jan 18 - First Q Moon
  - Jan 26 - Full Moon
  - Mars low in early evening
  - Jan
  - Jupiter near Taurus
  - Uranus near Pisces
  - Venus near Sun at Sunrise and Saturn higher

Astro Toys - Great Red Spot - Jeff Hinline

Jeff Hinline ([www.GreatRedSpot.Com](http://www.GreatRedSpot.Com)) talked about many pieces of astronomy equipment that through his business.

- Lumicon Filters (and other products)
- TeleVue Eyepieces, Paracors, and powermates which are on sale for 10% off until Dec 31, 2012
- iOptron Telescopes and Mounts
- Collimators
  - Glatter Collimator, Bug - 2 Bug
  - Hotech - Advanced CT Collimator for SCTs (\$455)
  - Hotech - Self-centering Adaptor laser collimator
- Lasers (red, green and blue in various wattages)
- Finders (Telrads, AstroTech, Laser Holders)
- Binoculars

Secretary's Report was published in the December Star Stuff and approved

Treasurer's Report was published in the December Star Stuff and approved

(continued on Page 7)

# FAAC General Meeting Minutes December 6th, 2012

By Doug Bauer Secretary  
(continued from Page 6)

Nominating Committee (Jim Frisbie, Frank Ancona and Bob FitzGerald)

recommended the Roster for candidates for the Club Officers for next year.

Gordon Hansen - President

Jon Blum - Vice-President

Chuck Jones - Treasurer

Doug Bauer - Secretary

## Upcoming Events

Saturday, Jan 19 - 10:00 AM - Midnight - Ice Daze at Lake Erie MetroPark -

4:00 PM - Astronomy 101 - Dinner at Three Hermanos after Astronomy 101

## Club Business:

Motion by Bob FitzGerald was seconded and approved:

That the Board be instructed to setup a committee to explore amending the by-laws to provide that officer election terms be extended to two years and that 50% of the officer elections be staggered to alternating years for continuity of leadership.

## Sirius Award Nominations:

Gordon called for Sirius Award nominations. The club presents this, its highest honor, to a club member every year at the club banquet (May 4, 2013.) The board will accept nominations for this award until January 31, 2013. Prior year Sirius Award winners were: Bob FitzGerald, George Korody, Tim Dey and Bob MacFarland. These are the caliber of "shining star" persons you should consider nominating. The person nominated must be an active club member and cannot be one of the current elected club officers. Please forward your nomination(s), including a concise explanation of the person's qualifications to: [President@fordastronomyclub.com](mailto:President@fordastronomyclub.com) All submissions will be kept confidential.

Meeting was adjourned at 7:30 PM

**FAAC Equipment List 1-14-13 provided by Dennis Salliotte**

Item	Currently Held By:	Date Last Verified
<b>Telescopes</b>		
4" Dobsonian	George Korody	1/7/13
4 1/2 " Galileo Alt/Az Reflector	Bob MacFarland	1/10/13
8" Orion 8XTi Dobsonian	Dennis Salliotte	1/14/13
<b>Presentation Tools</b>		
Projector	Gordon Hansen	1/13/13
Projection Screen	Bob MacFarland	1/10/13
Speaker System w/wireless mic	Bob MacFarland	1/10/13
Bullhorn	Gordon Hansen	1/13/13
DVD Player	Gordon Hansen	1/13/13
<b>Demonstration Tools</b>		
Weight On Planets Scale	George Korody	1/7/13
Lunar Phase Kit	Bob MacFarland	1/10/13
100 ft Scale Model Solar System Kit	Bob MacFarland	1/10/13
<b>Display Items</b>		
Astronomy Event Sign (3' X 6')	Greg Knekleian - HJRO	1/14/13
PVC Display Board - Folding	Gordon Hansen	1/13/13
Banner - Large (32" X 16')	Bob MacFarland	1/10/13
Banner - Medium (24" X 48")	Bob MacFarland	1/10/13
Banner - Small (24" X 32")	Bob MacFarland	1/10/13
Tri-Fold Presentation Boards	Don Klaser	1/13/13
Tri-Fold Poster Board (Early Club)	George Korody	1/7/13
<b>Other</b>		
Sky Quality Meter	Art Parent	1/3/13
Canopy (10' X 10')	Greg Ozimek	1/14/13
Equipment Etching Tool	Bob MacFarland	1/10/13

Ford Amateur Astronomy Club  
Star Stuff Newsletter  
P.O. Box 7527  
Dearborn MI 48121-7527

