

Volume 18, Number 6

## In This Issue

### Page One

- The Cool Chemistry of Alien Life
- President's Corner

### **Inside Stuff**

- 4 Meeting Minutes
- 6 Next Meeting Agenda
- 6 Astro Imaging SIG
- 6 FAAC Events 2009
- 6 Items for Sale
- 7 Treasurer's Report
- 7 Beginner's Nights

#### Note!

#### New Meeting Room!

HFCC - Administrative Services and Conference Center (same building as before), in the Berry Amphitheater Auditorium

(For map see: http://www.hfcc.edu/ contact/campus\_maps.pdf)



June 2009

### NASA Space Place

# The Cool Chemistry of Alien Life

Alien life on distant worlds. What would it be like? For millennia people could only wonder, but now NASA's Spitzer Space Telescope is producing some hard data. It turns out that life around certain kinds of stars would likely be very different from life as we know it.

Using Spitzer, astronomers have discovered the organic chemical acetylene in the planet-forming discs surrounding 17 M-dwarf stars. It's the first time any chemical has been detected around one of these small, cool stars. However, scientists are more intrigued by what was not there: a chemical called hydrogen cyanide (HCN), an important building block for life as we know it.

"The fact that we do not detect hydrogen cyanide around cool stars suggests that that prebiotic chemistry may unfold differently on planets orbiting cool stars," says Ilaria Pascucci, lead scientist for the Spitzer observations and an astrophysicist at Johns Hopkins University in Baltimore, Maryland.

...continued on page 4

## Department Store Telescope and Mount, Oh, No!

President's Corner Doug Bauer, FAAC President

A couple of weeks ago I was visiting a friend of my in-laws in Wisconsin at his lake house in a fairly dark area.

I mentioned that the sky looked pretty dark and that the Milky Way was visible. We began to talk about astronomy and he found out that I was interested in astronomy and said he would like to learn more about it. In fact, he told me, he had a telescope in his closet that he had never been able to figure out how to use. He asked me to take a look at it.

I'm sure you have all had this experience. My first thought was, "What have I gotten myself into?"

It turns out that someone had given him an inexpensive (read "cheap") 2inch refractor with a right-angle diagonal on a very unstable mount. He said his son-in-law put it together, and that when they looked through it,

... continued on page 2

# STAR STUFF

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**STAR STUFF** is published eleven times each year by:

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

PRESIDENT: VICE PRESIDENT: SECRETARY: TREASURER: NEWSLETTER EDITOR: Doug Bauer Chuck Jones Lori Poremsky / Kevin Medon Steve Flessa Dale Ochalek

#### 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, Administrative Services and Conference Center in Dearborn. Refer to our website for a map and directions (www.boonhill.net/faac).

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 Richmond Airport, Unadilla, given prior permission, and Lake Erie MetroPark. 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: **248-207-2075**. Or send email inquiries to **fordastronomy@comcast.net**.

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 Member:	\$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 subscription request and payment. Do not send any money directly to the FAAC for this.

#### Star Stuff Newsletter Submissions

Your submissions to *STAR STUFF* are more than welcome! Send your story and/or images to the editor at *dake00k@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 that weekend can be included in that issue.

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

#### President's Corner... (continued from page 1)

everything was upside down and they couldn't seem to fix it and never used it again.

I got the scope set up and explained that things will look upside down through this scope. I was able to get the scope pointed at Saturn and to my surprise, it was recognizable. I couldn't see any moons and could just see the tiny spikes sticking out of it, sort of like a Saturn Kabob. The finder scope was so small, that it was unusable. The eyepiece was one of those .9 inch eyepieces and had a lens slightly larger than a pinhead. It didn't have any tracking capability and by the time he looked through it, Saturn wasn't there. Not to mention just breathing on the scope would make it move. He eventually got a glimpse of the ringed planet, but it was not the WOW experience you usually get with a decent telescope looking at Saturn.

He has five grand daughters and would like to be able to have them look through a telescope and see some of the nightly wonders of his dark skies. He asked me what kind of telescope he should get.

I have been trying to figure out what is the right telescope for someone like him. I am going to encourage him to join an astronomy club to develop his knowledge of the sky. He is a very intelligent person and a club would really speed up the learning curve.

I have been evaluating various scopes. I ruled out Newtonians because of the collimation issues. I looked at several SCTs, but he would not be able to find anything without a GoTo capability. When you add GoTo functions, you still have to be able to locate some alignment stars. Then there is the issue of weight. He is 70 years old and had a massive heart attack two years ago, so there is a limit to the amount of weight he can lift. This takes most 8 inch SCTs out of contention.

Meade has a new 6-inch ETX Light Switch, which supposedly aligns itself using an onboard CCD camera. It also has a sky tour function with a built in speaker. This might work.

I have sent him a link to the Milwaukee Astronomical Society and encouraged him to attend their meetings before he buys a telescope. But if he doesn't want to, I think I will recommend the ETX-LS. It might work well for him, or might end up in a closet waiting for my next visit.

### Cool Chemistry ... (continued from page 1)



Do alien planets around other stars have the right ingredients for a pre-biotic soup?

That's because HCN is the basic component for making adenine, one of the four informationcarrying chemicals in DNA. All known life on Earth is based on DNA, but without adenine available, life in a dwarf-star solar system would have to make do without it. "You cannot make adenine in another way," Pascucci explains. "You need hydrogen cyanide."

M-dwarf and brown dwarf stars emit far less ultraviolet light than larger, hotter stars such as our sun. Pascucci thinks this difference could explain the lack of HCN around dwarf stars. For HCN to form, molecules of nitrogen must first be split into individual nitrogen atoms. But the triple bond holding molecular nitrogen together is very strong. High-energy ultraviolet photons can break this bond, but the lower-energy photons from Mdwarf stars cannot.

"Other nitrogen-bearing molecules are going to be affected by this same chemistry," Pascucci says, possibly including the precursors to amino acids and thus proteins. To search for HCN, Pascucci's team looked at data from Spitzer, which observes the universe at infrared wavelengths. Now that ST-5 has demonstrated the safety of Planetforming discs around M-dwarf stars have very faint infrared emissions, but Spitzer is sensitive enough to detect them.

...continued on page 4

### **Cool Chemistry** ... (continued from page 3)

HCN's distinctive 14-micron emission band was absent in the infrared spectra of the M-dwarf stars, but Spitzer did detect HCN in the spectra of 44 hotter, sun-like stars.

Infrared astronomy will be a powerful tool for studying other prebiotic chemicals in planetforming discs, says Pascucci, and the Spitzer Space Telescope is at the forefront of the field. Spitzer can't yet draw us a picture of alien life forms, but it's beginning to tell us what they could—and could not—be made of. "That's pretty wonderful, too," says Pascucci.

For news of other discoveries based on Spitzer data, visit www.spitzer.caltech.edu. Kids can learn Spitzer astronomy words and concepts by playing the Spitzer "Sign Here!" game at spaceplace.nasa.gov/en/kids/spitzer/signs.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with NASA.

# May Meeting Minutes

Kevin Medon/Lori Poremsky

Attendance: 32+

President Doug Bauer called the meeting to order at 5:40 p.m. in the HFCC Berry Amphitheater Auditorium in the Administrative Services & Conference Center building with introductions, while pizza and pop were enjoyed.

Doug Bauer noted that all general meetings will take place in the HFCC Berry Amphitheater Auditorium in the Administrative Services & Conference Center building at least through June 2010.

Several members shared observing experiences. Ken Anderson shared his observing experiences up north in the Gaylord area. Sandra Macika noted her observations of rain appearing to fall up during her observations session with a Boy Scouts outreach.

Tim Dey of FAAC provided the main presentation on the Lincoln Park Observatory restoration project in Lincoln Park. Tim noted the progress and indicated donations that he has received to keep this project on target.

He approached the group asking for assistance from the FAAC to help with the overseeing maintenance of the telescope in the future. The FAAC would not be responsible for the financial burden, only the lending of expertise to keep the telescope operating. FAAC's involvement passed by a unanimous vote. Greg Ozimek suggested that a special group be put together to oversee this project.

Jon Blum provided an overview of the recent Texas Star Party. His presentation included pictures, description of observations and what takes place at a Star Party. For those who need more information he would be happy to discuss on a one-on-one basis.

Kevin Medon gave the Secretary's report indicating that one new member has joined since April 15th. Total membership is at 105 regular paid members and 82 lifetime members. Out of these, 37 have not paid 2009 membership dues. We are moving the 37 unpaid members by:

- Eliminating their Yahoo group privileges.
- Eliminating access to private viewing sites.

This would leave a total of 150 active FAAC members.

The April minutes were approved as written as motioned by John Schroer.

There was no Treasurer's report or Equipment Manger's report this evening.

Gordon Hansen noted that the SIG meetings will be taking place on the second Thursday of the month. The next is one is scheduled for June 11th. The meeting will take place in the HFCC Berry Amphitheater Auditorium in the Administrative Services & Conference Center building.

Frank Ancona noted that there was nothing new to report from the Dark Sky Committee this month.

John Schroer reported on events for the International Year of Astronomy 2009. The club has placed the order and scopes are expected in the June/July timeframe. Contact John Schroer for further information at ka8grh@yahoo.com or jschroer@sciencedetroit.org.

Discussion took place regarding a means to get more people to look through telescopes during the International Year of Astronomy. Suggestions were Beginner's Nights, take your scope to a movie theatre, buddy up with some folks in your neighborhood and host a neighborhood Star Party.

... continued on page 5

### Minutes ... (continued from page 4)

Astronomical League dues are \$7.50 per person. These are due next month. Please contact John Schroer for more information.

The Detroit Science Center is sponsoring a Blood Drive on July 14th from 11 a.m. to 5:00 p.m. as part of the Star Trek Experience. You are welcome to come dressed in Star Trek attire. We need support! Pre-registration is appreciated. The Red Cross is unwilling to set-up if the Science Center does not have enough pre-registrations. Contact John Schroer at ka8grh@yahoo.com or jschroer@sciencedetroit.org.

Don Klaser is seeking volunteers to help out during some kids' events taking place at the Detroit Science Center on June 17th and July 20th. They will be running half hour sessions. If interested contact Don Klaser.

Kevin Medon indicated that the first cable show has been taped and is in the final stages of post production. It will be ready and available for distribution to other cable companies by this Saturday. The next show is scheduled to be taped on June 15th, with a meeting on June 8th for pre-production. For those who would like to get involved, please contact Kevin Medon.

Bob McFarland noted the progress of retaining Lake Erie Metro Park access. Meetings with park management are still taking place, and nothing has yet been decided. It is likely that prearranged special events can still take place, just as Beginner's nights. It is unlikely that access to the park would be allowed at will.

The meeting was called to a close by Doug Bauer at 7:40 p.m.

#### **Recurring Events**

2009 is the International Year of Astronomy (IYA 2009) celebrating 400th year of the (Galileo's) telescope. American Astronomy Society and Astronomical League are celebrating "International Year of the Telescope." All year long, expect speakers. Astronomy Day will be advertised greater, and we may get additional support for our AATB. DSC, Cranbrook, FAAC, and GLAC plan to bring more astronomy to the general public. Set up telescopes in your local community/neighborhood.

Eric Rasmussen will be planning events at University of Michigan (Dearborn and Ann Arbor) and HFCC. U of M will have Saturday Morning Talks. John Schroer, the FAAC chairman, passed out several handouts at the board meeting to show national intentions. Plastic replicas of Galileo's telescope with real glass lenses will sell for \$10-\$11, and you will be able to see Saturn and Jupiter with it. John is pre-ordering 100 of these telescopes for November, and they can be mounted on a camera tripod (making it more stable than Galileo).

The SIG meetings are the second Thursday of each month (next one July 9) at 5:30 pm in the Berry Amphitheater Auditorium in the Administrative Services and Conference Center at Henry Ford Community College just down the hall from the Rosenau Conference Room. Topic – TBD.

FAAC General Meetings are every fourth Thursday of each month, with the next one June 25 in the new location, Berry Amphitheater Auditorium at HFCC.

The FAAC Board meetings are usually the first Thursday of each month at Senate Coney Island 3345 Greenfield Rd., Dearborn, (313) 441-1027.

Beginner's nights continue in 2009 on 1st quarter moon Saturdays (June 27, July 25, August 29, and October 24), with the intent to help people use their equipment (not public outreach). John Schroer is putting together the handouts for Beginner's Night at Island Lake State Park (Spring Mill Pond) and also Lake Erie Metropark (Cove Point Picnic Area). Bring your telescope/binoculars, or look through others. Events will be posted in the Park Bulletin board, Metropark Quarterly Newsletter, Ford World, and astromichigan.org.

Planetarium, Lecture and Observatory Schedule, Spring 2009. Henry Ford Community College and the University of Michigan – Dearborn. All events are free and open to the public.

Public Observing Session – From Spring to Summer – June 19 – 10:00 p.m. – Observatory

The Planetarium is located on the main campus of HFCC in the Science Building Room S-126. The Observatory is located on the main campus of UOM-Dearborn, Science Learning and Research Center, 3rd floor. UM-D lecture location has yet to be determined. Check website for further updates. HFCC Lecture will be held in room LA-14 of the Reuther Liberal Arts Building at HFCC.

FAAC Club Wares with embroidered five color club logo can be ordered through Diane Worth (contact Diane at dianewsky\_night@yahoo.com for accurate pricing; these are estimates only, as

...continued on page 6

### Minutes ... (continued from page 5)

heard by the secretary, and there may be additional cost for shipping):

Ottoman "Official" Club Short Sleeve Shirt (black or white) \$37, Bill Blass Long Sleeve Dress Shirt (blue) \$42, Casual Club (blue) \$35, Hat \$19, patch \$9, Blanket nylon & fleece \$33, Duffle Bag (blue) \$20, Expandable Brief (blue) \$20, Chart Authority Hooded (black) \$16; Port Bag Sweatshirt (black) \$32 no longer avail, XL Hoodless additional \$3; Sweat Shirt notembroidered and T-shirt (grey) \$20, notembroidered (white, grey, blue) \$8. Diane Worth said she will bring filled orders to AATB. Contact Diane Worth.

The FAAC Library and DVD collection is in HFCC Science Building Room 109. The list of some 100+ books and brief descriptions is available at the FAAC Yahoo site; books can be signed out for one month, with extensions allowable. President Doug Bauer and VP Chuck Jones are backup key holders for returning and signing out books.

Seeking 2009 speakers for both FAAC 30-60 minute Main Presentations, and 15-20 minute Tech Talks. Contact Bauer Doug at dougbauer@comcast.net or call 313-828-7385.

## Meeting Agenda - June 25

#### 5:30 pm - HFCC - Berry Amphitheater Auditorium -Admin. Services and Conference Center

(Map can be found at: http://www.hfcc.edu/contact/campus maps.pdf)

#### **Opening/Introduction/Member Observing**

Presentation: Star Hopping in the HFCC Planetarium -Sandra Macika (FAAC)

Tech Talk: Observation Planning with Free Software -Steve Uitti (WAS)

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

### **Club Projects/Committees/Member Support**

- Astrophoto SIG Gordon Hansen •
- Dark Sky Committee– Frank Ancona •
- Astronomical League Dues! John Schroer
- **Open Discsussion**
- Adjourn

## Astro Imaging SIG

Gordon Hansen

All are invited to join us in the Astroimaging 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 July 9. Note the new meeting room location – HFCC Admin. Services and Conference Center (same building), Berry Amphitheater Auditorium.

Topics invited.

## FAAC Events 2009

Kevin Medon and Lori Poremsky

- June 27 – Beginners' Night, Island Lake Recreation Area, Lake Erie Metropark July 20 - Detroit Science Center kids events. Requesting volunteers for half hour sessions. Contact Don Klaser. July 14 – DSC Blood Drive 11:00 a.m. to 5:00 p.m. Pre-registration is appreciated. Contact John Schroer ka8grh@yahoo.com or jschroer@sciencedetroit.org 25 – Beginners' Night, Island Lake Recreation Area, Lake Erie Metropark August 29 - Beginners' Night, Island Lake Recreation Area, Lake Erie Metropark **September TBD** – Astro-Imaging Workshop, Gladwin 17-20 – Great Lakes Star Gaze, Gladwin 25-26 – Astronomy on the Beach – Maple **Beach in Kensington Park**
- October 24 - Beginner's Night - Island Lake

## Items for Sale

MEADE 8" LX 200 GPS- Purchased summer 2004, new from John Kirchhoff, Riders. Premium coatings, matching aluminum dew shield, w/goto. Pristine condition. It sits in my home, covered and waiting to be taken out to explore the star filled night sky. New cost was \$2,560, asking \$1,300.

Diane Worth at 248-980-7832 Contact: or dianewsky\_night@yahoo.com.

### Items for Sale... (continued from page 6)

**Meade Lightbridge Deluxe 12"** – F/5, 1524mm focal length. Purchased new last year. Perfect condition mechanically, optically and cosmetically. Big, clear deep sky views. Built-in battery powered cooling fan, two-speed Crayford focuser (1.25 / 2-inch). Easy to transport, set up collimate and use...smooth as silk. Upgraded with Bob's knobs and heavier collimation springs. Includes shroud, cover, Telrad and secondary mirror heater. Over \$1000 invested, will sell for \$650.

Contact John Johnson at jjohnsonpub@yahoo.com or (248) 515-0014.

**Schmidt-Newtonian 10"** – F5.35, 1360 mm focal length with 2" focuser, 60 mm guide scope, Thousand Oaks Full aperture solar filter (Mylar). Cooling fan, extra set of "O" rings, Optron Corrector plate. Crestliner mount (on wheels) available. Scope made by Nelson Lewis of Detroit Astronomical Society in 1962. Purchased 1981. Selling telescope for \$325. Mount for \$200.

Contact Harold Thomason 313-584-7465.

## Treasurer's Report

Steve Flessa

Deut Assessed	6/18/2009 Balance
Bank Accounts Checking Savings TOTAL Bank Accounts	\$1,701.69 \$170.80 <b>\$1,872.49</b>
Cash Account	
Cash TOTAL Cash Account	\$28.50 <b>\$28.50</b>
Investment Accounts	
CD 1 CD 2	\$1,073.78 \$1,042.54
TOTAL Investment Accounts	\$2,116.32
Asset Accounts	
Equipment Scholarship	\$1,159.46 \$499.05
TOTAL	\$1,658.51
TOTAL	\$5,675.82
Memo:	
GLAAC	\$2,571.60
OVERALL TOTAL	\$8,247.42

### June 27, July 25, August 29, October 24

Ford Amateur Astronomy Club presents

Beginners Nights 2009

with: New Detroit Science Center and Rider's Hobby

Do you have a new telescope that you are learning to use? Do you want to see samples of what the night sky has to offer? Consider coming out to Island Lake State Recreation Area on Beginner's Night. These Saturday nights are dedicated to providing equipment and observing assistance to new astronomers (weather permitting). The events will take place regardless of sky conditions, cloudy or clear. If it is raining, the event will be cancelled.

The Island Lake site is at the "Spring Mill Pond" parking lot/picnic area, at the Island Lake State Recreation Area, on Kensington Road, south of I-96 between South Lyon and Brighton.

For more information, contact Gordon Hansen, 734-675-6137 or email Gordon at fordastronomy@comcast.net

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

