Astronomers Stumble onto Huge Space Molecules

By Trudy E. Bell and Tony Phillips

Deep in interstellar space, in the swirling gaseous envelope of a planetary nebula, hosts of carbon atoms have joined together to form large three-dimensional molecules of a special type previously seen only on Earth. Astronomers discovered them almost accidentally using NASA’s Spitzer Space Telescope.

“They are the largest molecules known in space,” declared Jan Cami of the University of Western Ontario, lead author of a paper with three colleagues published in Science online on July 22, 2010, and in print on September 3.

Not only are the molecules big: they are of a special class of carbon molecules known as “fullerenes” because their structure resembles the geodesic domes popularized by architect Buckminster Fuller. Spitzer found evidence of two types of fullerenes. The smaller type, nicknamed the “buckyball,” is chemical formula C60, made of 60 carbon atoms joined in a series of hexagons and pentagons to form a spherical closed cage exactly like a black-and-white soccer ball.

Spitzer also found a larger fullerene, chemical formula C70, consisting of 70 carbon atoms in an elongated closed cage more resembling an oval rugby ball.

Neither type of fullerene is rigid; instead, their carbon atoms vibrate in and out, rather like the surface of a large soap bubble changes shape as it floats through the air. “Those vibrations correspond to wavelengths of infrared light emitted or absorbed—and that infrared emission is what Spitzer recorded,” Cami explained.

Continued On page 3

President’s Corner

Memoirs of a Soon to Be Former FAAC President

Happy New Year!

As you can see, we are still publishing the StarStuff Newsletter. Jennifer Zdanowski, one of the HFCC Astronomy Club members who recently joined our club, has volunteered to take on the StarStuff Editor position. Thank you very much Jennifer!
Presidents Corner
(continued from Page 1)

As Jennifer takes on this responsibility she is also looking for articles for the StarStuff, so if you have an idea for an article that you would like to write, contact Jennifer at jenzdanowski@yahoo.com.

Well I did it. I made it through three years as FAAC President without being thrown out of office and hardly any scars. No tar and no feathers! That said, the three year term limitation has given someone else the opportunity to serve the club as President. Most likely, I will return as Club Secretary, unless someone else decides they want to do that job, so you haven’t seen the last of me.

It has been a fun three years and I have enjoyed working with everyone. We have had some great successes. We have initiated an annual Multi-Club Picnic, formed a good relationship with the HFCC Astronomy Club, developed the Astronomy for Everyone Community Access program, started a mentoring program, refurbished the HJ Robinson Observatory, and performed a significant number of outreach events with Scouts, Schools, Detroit Science Center and the Metro Parks, along with all of the other activities that are going on in the club. I really appreciate all of the individual efforts that it takes to keep all of the activities going.

Being a club officer is a very good experience, it gives you a chance to see all of the work that it takes to accomplish the many things that, from the outside, look easy. This gives you a great deal of respect and appreciation for the people that make the club tick and it gives you an opportunity to shape the direction of the club. You also get to have a nice dinner at the Senate Coney Island every first Thursday of the month with the rest of the Board and club members that show up to help.
Although fullerenes have been sought in space for the last 25 years, ever since they were first identified in the laboratory, the astronomers practically stumbled into the discovery. Co-author Jeronimo Bernard-Salas of Cornell University, an expert in gas and dust in planetary nebulae, was doing routine research with Spitzer's infrared observations of planetary nebulae with its spectroscopy instrument. When he studied the spectrum (infrared signature) of a dim planetary nebula called Tc 1 in the southern-hemisphere constellation of Ara, he noticed several clear peaks he had not seen before in the spectra of other planetary nebulae.

“When he came to me,” recounted Cami, an astrophysicist who specializes in molecular chemistry, “I immediately and intuitively knew it I was looking at buckyballs in space. I've never been that excited!” The authors confirmed his hunch by carefully comparing the Tc 1 spectrum to laboratory experiments described in the literature.

“This discovery shows that it is possible—even easy—for complex carbonaceous molecules to form spontaneously in space,” Cami said. “Now that we know fullerenes are out there, we can figure out their roles in the physics and chemistry of deep space. Who knows what other complex chemical compounds exist—maybe even some relevant to the formation of life in the universe!”

Stay tuned!

Learn more about this discovery at http://www.spitzer.caltech.edu. For kids, there are lots of beautiful Spitzer images to match up in the Spitzer Concentration game at http://spaceplace.nasa.gov/en/kids/spitzer/concentration.

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
December 31, 2010
By Gordon Hansen

Meeting Agenda - January 27

HFCC –Berry Auditorium - Admin. Services & Conference Center
For map see: http://www.hfcc.edu/contact/campus_maps.pdf
5:30 PM

Opening/Introduction/Member Observing

Main presentation:
Election of FAAC Officers
Doug Bock FAAC

Tech Talk:
Planetarium Software on Handheld Devices
Gary Strumolo

Club Projects/Committees/Member Support

2011 Astro Expo/Swap Meet - Sat, March 12th
Metro Beach Metropark Outreach - Sat, March 26th
Farmington Hills Nature Center Outreach - Sat, March 26th
FAAC Banquet - Karl’s Cabin in Plymouth - $30/person - Sat, April 16th
Astro-Imaging SIG

Club Business/Secretary/Treasurer/Equipment Reports

Club Projects/Committees/Member Support

Presidents Corner
(continued from Page 2)

I have enjoyed my tenure as Club President and am very proud of the Ford Amateur Astronomy Club for all working together to make it a friendly group to share our interest in astronomy.

In the words of Arnold Schwarzenegger, “I’ll be Baack!”

Thanks Again!!

Doug Bauer
DougBauer@Comcast.Net

<table>
<thead>
<tr>
<th>Bank Accounts</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Checking</td>
<td>$112.06</td>
</tr>
<tr>
<td>Savings</td>
<td>$1,391.17</td>
</tr>
<tr>
<td>TOTAL Bank Accounts</td>
<td>$1,503.23</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash Account</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$100.22</td>
</tr>
<tr>
<td>TOTAL Cash Account</td>
<td>$100.22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Investment Accounts</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 1</td>
<td>$1,051.47</td>
</tr>
<tr>
<td>CD 2</td>
<td>$1,089.75</td>
</tr>
<tr>
<td>TOTAL Investment Accounts</td>
<td>$2,141.22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Asset Accounts</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td>$1,970.92</td>
</tr>
<tr>
<td>Scholarship</td>
<td>$542.8</td>
</tr>
<tr>
<td>TOTAL Asset Accounts</td>
<td>$2,513.72</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OVERALL TOTAL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Memos</td>
<td></td>
</tr>
<tr>
<td>GLAAC</td>
<td>$1,904.58</td>
</tr>
</tbody>
</table>
Astro Imaging SIG  
Gordon Hansen

The December meeting was held at HFCC
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 10th. The meeting room location – HFCC Admin. Services and Conference Center (same building), Berry Amphitheater Auditorium.
Topics invited. Pizza served.

FAAC Events 2011  
Kevin Medon and Lori Poremsky

Jan 27 - General Meeting
Feb 10 - Astrophotography SIG Meeting
Mar 12 - Astronomy Expo & Swap Meet
Mar 26 - Metro Park Outreach

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

**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.

**MEADE Telescope** and Tripod 6 years old - in excellent shape
LXD 75 - Series Schmidt - Cassegrain 8” f/10 SC-8AT (Super Coated, Autostar Guided) - Focal Length 2000 mm Telescope weight = 24 lbs - with MEADE EMC Super Multi-Coatings and with optional Ultra-High Transmission Coating Tripod weight = 45 lbs - Die cast Aluminum German-Type Equatorial Mount with Variable-Height Field Adjustments Autostar Controller guides to 30,223 objects

Includes a Sun Filter, Overnight Protective Cover, Transportation Containers. Contact phone no. 248-851-5053, e-mail robertboswell@comcast.net

Two Scopes For Sale

**Celestron 6”** Schmidt Cassegrain w XLT Like new condition. With diagonal and finder.
Tote bag. $325 Retail $699

**Meade Lightbridge 10”** With std accessories. Used one time, includes transport boxes. Going for $475 Retail $599 + Ship + Tax Need to raise cash for toys.

Tom Blaszak key_string_guy@yahoo.com
We’ve been experiencing a lot of cold and cloudy days. One night in early January, was a surprise as I expected the viewing to be poor, but it was excellent. The view of M42 and basically anything I looked at that night was excellent. With the cold we’ve had fewer visitors. We have a new wish list and Tim Dey has found support from a local TCF bank that will donate toward observatory upgrades.

I saw a draft of the observatory handout that George Korody had in his pocket during the last executive board meeting. The flyer looks pretty good. The final version will be completed soon and we’ll have flyers to hand out to visitors at HJRO. George is talking with Ashe dome about a modification to insure we can close the shutter manually, should the motor die or we have a loss of power at the observatory.

A few brave FAAC souls were out during the lunar eclipse, but snow on the dome and the poor weather cut eclipse observing short. We actually used a couple of my telescopes and set them out outside, due to snow on the shutter. We have a nice “painters accessory pole” and broom to get snow off the shutter and dome during the winter. I’m looking forward to cleaning off the dome in the future, so we won’t have any situations where the snow prevents winter observing.

Art Parent has been a frequent visitor lately. Jennifer Zdanowski brought her son Erik out to the most recent opening of the observatory. He is five years old and it was fun to see his expression as he looked at the moon, Jupiter and M42 on that cold January night. We have a heater in the observatory, which works fairly well. But of course it’s still a far cry from the warmth of a living room. New configurations like remote control with cables to a telescope from a heated van may be tested in the near future.

I took some photos of Jennifer and Art Parent during the cold weather and cloudy lunar eclipse that we experienced. Unfortunately, I was in too much of a hurry and didn’t bolt down my camera to the tripod sufficiently to avoid shaking of the camera. I was surprised to find all my photos blurry, so there are no photos for this months report.

During the end of the lunar eclipse, the clouds prevailed. The three of us sat inside the observatory with the heaters on. We chatted about astronomy and dreamed of clear skies. At times we’ve used the observatory as a warm up shed and observed with telescopes outside. This will change once I start clearing snow off the dome, (The first test is tonight as soon as I’m finished writing this.)

I briefly visited the driveway of the Perkins Observatory near Columbus Ohio. My sister lives 8 miles away from that observatory. I always noticed the sign on US23 in Delaware Ohio, but never turned in or investigated it.

On January 2nd, while returning home, I decided to stop briefly and try to find the observatory. The campus was closed so I didn’t drive to the observatory. But I stopped at the driveway and jumped out of my car. Setting up my camera on a tripod I snapped a 10 second exposure of the sign with the sky in the background.

(There’s a 32 inch Newtonian nearby.)
Letter From Pat Demanski, Wayne State University

Dear Astronomy Club Members,

Hello. My name is Pat Domanski and I work for Wayne State University, Department of Physics and Astronomy. I may have met you at the event: Astronomy at the Beach, September 2010, at Kensington Metro Park.

I am writing to ask if you and your club members would be interested in receiving information about public events at our planetarium (many of which are free to the public) and information about our exciting physics and astronomy programs. The Wayne State University Planetarium is located on the campus of Wayne State University on the lower level of the Old Main building at the corner of Cass and Warren Avenues.

New Science Lecture Series: Science Under the Dome

We are happy to announce a new science lecture series called Science Under the Dome! These exciting lectures are presented, free to the public, in our planetarium! We are currently open for reservations for the lecture titled: The Golden Age of Cosmology, to be held Saturday, January 22, 11 am. Professor David Cinabro, a Wayne State University physicist, will present this stimulating lecture. Here is a sneak peek: Professor Cinabro will review the modern understanding of Cosmology, and the study of the origin and fate of the universe. He will describe the pillars of the Big Bang model for the origin of the universe, and highlight the rise of the dark sector with evidence that our universe is dominated by the, as yet unconfirmed, dark matter and dark energy. "This leads to a possible, unfortunate fate for our universe," says Professor Cinabro.

You may remember Prof. Cinabro from Astronomy at the Beach. He was at the Wayne State University table talking about cosmology and giving very cool demonstrations!

As mentioned above, our Science Under the Dome lectures are free to the public. An RSVP is REQUIRED, though, as seating is limited. If you and members of your club are interested in attending the January 22nd lecture of The Golden Age of Cosmology (as our January 21 lecture is completely filled) please go to http://events.wayne.edu/2011/01/22/science-under-the-dome-the-golden-age-of-cosmology-28864/ to reserve your seat. You will see an RSVP tab to click. A confirmation email will be sent to you. If you do not receive a confirmation email, please let me know. I would suggest reserving your seats as soon as possible. An RSVP must be completed for each person attending.

Public Planetarium Shows

We currently offer free public planetarium shows (we have a new state-of-the-art digital projection system) and we present current night sky, interactive demonstrations and fulldome films. With the start of our Winter 2011 semester we will be offering the fulldome film Black Holes: The Other Side of Infinity, narrated by actor Liam Neeson. Information is available at our website http://planetarium.wayne.edu/. We do NOT take reservations for these shows and seating is on a first come, first serve basis. We recommend that you arrive at least 20 minutes prior to show time.

New Bachelor of Arts in Astronomy – An Undergraduate Degree Program

We would like to announce our new Bachelor of Arts in Astronomy degree program that started with our Fall 2010 semester. This undergraduate degree program is unique in the state of Michigan and will provide students a background in both physics and astronomy!

(Continued on page 8)
Professor Cinabro is the undergraduate advisor for this program and can be reached at: cinabro@physics.wayne.edu. Also, if you go to www.physics.wayne.edu/ (our departmental website) and click on the Undergraduate Astronomy link that is on the main page, you will see the BA Astronomy program printable brochure. This brochure will give you course requirements -specific to a degree in Astronomy- and toward an undergraduate degree (which requires approximately 120 credit hours).

Additional information about the specifics of the BA Astronomy program can also be found at: http://www.clas.wayne.edu/newsletters.asp Physics and Astronomy Matters Winter 2011 Newsletter. There is an article in this newsletter about the BA Astronomy program on page 3.

State University table talking about cosmology and giving very cool demonstrations!

First Summer Camp for Children – Camp Cosmos

We will be holding our first summer camp for children this year called Camp Cosmos (suggested grade range is 7-10). Camp participants will learn to use Starry Night software (which we present in the dome of our planetarium). With this knowledge, students will work in teams to develop their own planetarium automations. Children will attend physics & astronomy lectures and participate in labs. Children will also have the full campus experience as they visit the WSU Fitness Center and have lunch on campus each day. This is a two-week program. Contact outreach@physics.wayne.edu or call 1-313-577-2107 for more information. There is a fee for this program.

New Planetarium Website

We will be upgrading to a new planetarium website within the next two weeks and will be providing more information to the public! Our link will remain the same: http://planetarium.wayne.edu/. You can find directions, calendar of events, etc. at this site.

Reserve Our Planetarium for Special Events

Would you like to bring your club or organization to our planetarium for a Special Event? We would be happy to help you design your special visit! A small fee is charged for private reservations. Please contact us at outreach@physics.wayne.edu or call 1-313-577-2107 for more information.

Thank you for reading my email. If you have any questions please feel free to email or call.

Regards,

Pat Domanski
au7808@wayne.edu
outreach@physics.wayne.edu
313-577-2107.
FAAC General Meeting Minutes
December 2, 2010
By Kevin Medon/Lori Poremsky, Secretary

Attendance: 43+

The meeting was called to order by President Doug Bauer at 5:30 p.m. Members enjoyed pizza while several new members and visitors introduced themselves and were welcomed. Several members followed the conversation with their observing experiences over the last month.

Doug Bauer mentioned that Greg Knekleian would be stepping down as StarStuff editor. He thanked him for his service over the last year. Doug then asked for a volunteer who would be willing to step in and take over as StarStuff editor. One of our newest members, Jennifer Zdanowski volunteered. Thank you Jennifer!

Doug Bauer also thanked Ellen Duncan for bringing pop and water to the meeting.

The main presentation was given by Gordon Hansen and focused on astro photographs that he and other members of the SIG have taken over the last year or so. If present, other members of the SIG spoke about their respective photos.

Milton Antonick gave the tech talk this evening on “How to Build a Light Box”. This tool is used for viewing star charts in the evening hours.

Club Business
Secretary’s Report – Lori Poremsky noted that the membership numbers are as follows:
- 80 Regular members
- 82 Lifetime members
- 7 Astronomical Clubs and Friends
- 169 Total

Lori thanked Gordon Hansen for sending out renewal notices in November.

Motion was made and seconded to approve the October minutes; approved.

Treasurer’s Report – Gordon Hansen noted that the complete Treasurers report is in Star Stuff.

Equipment Managers Report – All equipment is accounted for.

Projects/Committees/Events

Mention was made that a Lunar Eclipse will occur at 3:17 p.m. on Tuesday, December 21st.

January 15th, the FAAC will be participating in Lake Eric Metro Park Ice Days. We’ll have a table and be presenting during the day and will be available in the evening hours for viewing. Please feel free to participate in any portion of the event.

Doug Bauer noted that the Board is considering purchasing a small dob as a loaner scope for the club. The cost would be under $500. He asked for a vote as to how many would consider using the scope if purchased. A majority voted yes. There were only a handful of “no” votes. John Schroer noted that he would help train people on how to use the scope and he would help store it.

The nominating committee announced that the following people are running for Board elections to be held at the January General meeting:

- **Gordon Hansen** – President
- **Jon Blum** – Vice President
- **Chuck Jones** – Treasurer
- **Doug Bauer** – Secretary

If you are interested in running for one of the positions, please notify Doug Bock who will be running the elections.

(continued page 10)
I joined FAAC several months ago in order to learn more about astronomy, do some observing, and to make some new friends. I have been very successful with all of these goals by attending Beginner’s Night at Island lake, many trips to the HJR Observatory, and attending the monthly club meetings. I know that I will continue to make friends and enjoy astronomy with everyone I meet here at FAAC.

I am currently a full time pre-nursing student at Henry Ford Community College and am in the process of applying to several different universities in pursuit of my BSN. After taking an astronomy class in 2008 my love for the sky was awakened and I joined the HFCC Astronomy club. After being in the HFCC Astronomy Club for a semester I was appointed secretary and remained in that position for two years. I was appointed Vice President in the Fall 2010 semester. Going into the Winter 2011 semester I have been elected President of the HFCC Astronomy Club. I am excited to take on this opportunity and hope to inspire many of my fellow students to join the HFCC Club and the FAAC as well.

I enjoy spending time with my children and introducing them to astronomy. I have been fortunate enough to have had the opportunity to take both of my children to the HJR Observatory and they were able to see Jupiter, the moon, the Orion Nebula and Uranus just to name a few. I will forever remember both of their reactions as they peered through a telescope for the very first time.

I have learned so much already and really look forward to many more great experiences with FAAC. Thank you for the opportunity to serve as your newsletter editor. I hope to keep it interesting and fun to read, but I need your help! Send me articles at: jenzdanowski@yahoo.com

Thanks! Looking forward to a great year!

Jennifer Zdanowski
Lake Erie Metro Park Ice Daze
by Greg Knekleian, Ken Anderson

I arrived at about 3PM other FAAC members had already been at the Nature Center for hours at the FAAC table. Near the FAAC table Dennis Salliotte’s 10 inch Celestron was on display. George and Pat Korody were at the table when I arrived, and there were several other FAAC members present during the event.

Bob Macfarland presented the Astronomy 101 lecture to a packed classroom. There were perhaps 8 or 10 FAAC members in the crowd as well. For the presentation, Dennis Salliote had his SCT setup, Ken Anderson had many binoculars, Bob MacFarland had his Televue 85mm refractor, and I brought a small Newtonian.

At 5PM the sky was overcast. Many FAAC members went to the local Mexican restaurant. By 7PM, the sky offered brief glimpses of the moon and Jupiter through mostly clouds and haze. As the skies cleared up a little bit, Ken Anderson brought out his big 17.5 inch Discovery dob and was picking out fainter objects. Dozens of visitors braved the cold and looked through the telescopes. Dennis Salliote had his Celestron Ultima 2000 SCT, a visitor setup a small refractor telescope and asked for assistance, I setup my little Bushnell F4 4 inch newtonian, and the MT80 Vixen Binoculars. Straw bales were nearby and offered good viewing platforms for younger viewers.
Ken Anderson’s report excerpt
Bob Macfarland, Bob Fitzgerald, Dennis Salliotte, Greg Knekleian, George & Pat Korody, Tim Dey, Art Parent, Jennifer Zdanowski and Ken Anderson were among the club members present.

*Waxing Gibbous "3/4" Moon - could see entire visible moon (UB-best, Skyglow, and no filter)
*Jupiter (1 dark bands, 1-2 thin bands), 3 moons on one side (below) and the 4th moon above
*Uranus (small disk) no longer in same FOV as Jupiter
*M42 (OIII looked best, Ultrablock, Skyglow, Nothing) & trapezium
*C39(NGC2392) Eskimo Planetary (OIII)
*C13(NGC457) Owl Open Cluster
*M103 - while looking/scanning for C13
4.7mm 84 AFOV w/o Paracorr II (389x 0.22 deg TFOV):
*Jupiter (1 dark bands, 1-2 thin bands), 3 moons on one side (below) and the 4th moon above, but don't remember how many moons were in same FOV. No moon shadows were visible on planet.
*Unable to find Uranus in the clouds
40mm 70 AFOV w/o Paracorr II (46x 1.53 deg TFOV):
*Jupiter (1 dark bands), 3 moons on one side (below) and the 4th moon above all in same FOV
*Uranus (small disk) no longer in same FOV as Jupiter (but not that far 10% outside FOV)
Greg K’s portaball 4" reflector:
Jupiter (1 band?) 3 moons on one side (below) and the 4th moon above all in same FOV, Uranus plus 2 stars in same TFOV.

Astronomy in Maui
Submitted by Jon Blum

Jon Blum observed the eclipse of the Moon from Maui on December 20. The sky was partly cloudy, so when clouds covered the Moon, he arranged some of the attendees from the Mahana Astronomy Club into a model of the Sun-Earth-Moon system, as shown in this photo.

Right: Ice Sculpture from Lake Erie Metro Park Ice Daze
Photo by Greg Knekleian
Astronomy Expo and Swap
8th Annual
Saturday March 12, 2011  9:00 am - 4:00 PM

Days Activities

Astronomy Discovery and Attendee Participation

10:00 am Astronomy 101 - G Hansen
11:00 am Binocular and Small Scope Observing - J Frisbie

Workshops - Free Form Q & A

1:00 pm Before Observing - Eyepiece, mirror, lens cleaning, imaging and CCD equipment, the GEM and AltAz tracking, electronics in Astronomy, reference books and star charts. Solar filters. Observing logs and software, what to take to star party & observing.

2:00 pm Observing Site - Site etiquette, Go To Mounts. Using the Intellescope Collimation how to star hopping and session tips. Imaging manipulation software, using scopes and telescopes for maximum session rewards.
Admission is $5 at the door.

Table Fee for Resellers: $15 in advance or $20 at the door.

Doors open at 8AM for table/vendor set up.

Make checks payable to: FAAC   P.O. Box 7527, Dearborn, MI 48121-7527

Vendors, Manufacturers, Commercial contact Tom Blaszak at: key_string_guy@yahoo.com or Doug Bauer at: DougBauer@comcast.net
“Moon” SCI FI movie review
by Greg Knekleian

What do you do when you feel like star gazing, but the weather is not cooperating? How about watching a movie with an astronomy theme or at least a “space” twist?

While not about a pure astronomy, an indie Sci-Fi picture called “Moon” was something I picked up during the holiday season from a Blockbuster’s bargain DVD bin. This DVD has plenty of extras, two commentary tracks and even subtitles for the commentary tracks.

The story is based on a mining operation on the moon in the future. “HE3” or Helium 3 is harvested for nuclear fusion powered fuel.

There’s plenty of SCI FI stuff and nice graphics for this low budget Indie Film. Watching it, I couldn’t help thinking about other sci-fi films in the past including 2001 Space Odyssey. This film has some nice suspense in it. Once you start watching it, you’ll want to keep watching it, to see how it all ends.

Although it doesn’t have any “Astronomers” in it, there’s enough moon scenery in it to keep an astronomer interested. I’d rate this four out of five stars. (One warning: It’s R rated and there is some swearing in it.)

Some state HE3 captured in the moon is a possible viable source of energy for nuclear fusion.

Nice SCI-FI components in the film include moon mining, a robot and a human miner homesick and wanting to return home. There’s also plenty of extras on the DVD, more than you will typically find on many releases. Five Stars.

(left)
A rover approaches one of the “harvesters”.

The moon scenes were pretty believable. (Note: all screen shots from DVD of movie.)