

# Southern Skies

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Journal of the Southern Planetary Association

Winter 2014



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Atlas 5 with JUNO - see page 13 Credit: Suresh Atapattu

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**David Dundee**  
**Tellus Science Museum**  
**Cartersville, GA**

I had the most unusual Thanksgiving; I had warned my wife, Betty, not to make any plans because Comet ISON would round the Sun that day, and who knew what could happen.

I was right, and we spent the entire day at CNN.

Rates and submission formats for advertising space in SEPA's quarterly journal *Southern Skies* are:

Rates	Dimensions
\$100.	Full-page 7" wide x 10" high
\$50.	Half-page 7" wide x 4.5" high
\$25.	Quarter-page 3" wide x 4" high

These rates are per issue and in B&W copy. The back cover, inside back cover or inside front cover of our journal is also available either in B&W for \$125, or in color for \$150. A 10% discount to any size ad can be offered only with a year's (four issues) commitment of advertising. Ads accepted on a space available basis. Ads must be camera ready and conform to dimensions listed. Payment must accompany advertisement order, made payable to the Southeastern Planetarium Association (send payment to Secretary/Treasurer Patsy Wilson). The underlying mission of our advertisements is to promote resources, products, and services related to the planetarium profession. SEPA reserves the right to refuse advertisements.

As we entered the building, security eyed the cooler I'd brought with suspicion, asking whether or not it contained body parts. I explained that it was not body parts, but comet parts (dry ice, water, gloves, hammer, etc.). I don't like to be a talking head when I am being interviewed, I prefer to have something to show or demonstrate; it makes for better TV.

It was supposed to be just a morning interview, but it turned out they wanted to interview me for the afternoon show as well, which came on just after comet perihelion. They began to apologize to Betty, who had come with me - assuming she had pots simmering on the stove and ovens set to bake at home - offering us to partake of the catered Thanksgiving meal that was being laid out for CNN staff. Betty responded, "Someone else is cooking and cleaning up? Sounds like a win-win situation to me!" So we happily sublimated some dry ice in a beaker of water on air, and as the Comet ISON disintegrated on its trip around the Sun, we disintegrated some turkey with all the trimmings and, oh, pecan pies, too!

It was exciting to be on the air as the first NASA images of the comet remnants came in, but the "Comet of the Century" was reduced to less than the "Comet of the Week."

About a week later, I got a call from one of my staff in the planetarium, saying that there was a strange bright light in the planetarium's evening sky. The comet was gone, but I had forgotten about our virtual comet, and it was blossoming quite handsomely with a tail stretching half way across the

(Continued on page 13)

# IPS REPORT

**John Hare**  
**ASH Enterprises**  
**Bradenton, FL**

IPS 2014 is scheduled for Beijing, China. The conference dates are June 23-27, 2014, preceded by the IPS Council Meeting, June 21-22. I plan to attend both the conference and the Council meeting. Please contact me no later than June 17 if you have any items of business that you want discussed at the meeting.

If you're planning to attend IPS 2014 and you're a US citizen, a visa is required. Obtaining a visa requires some lead time and some patience in dealing with the process.

\* You will need a passport with at least 6 months validity (at the time of the visit).

\* You will need a letter of invitation from the IPS conference hosts. You can find their contact information at the official IPS 2014 Website [www.IPS2014.org](http://www.IPS2014.org).

\* You will need confirmed hotel reservations for your stay in China.

\* You will need 2 passport-size color photos.

Other personal information is required and is spelled out on the form that must be submitted to the Chinese Consulate to obtain your visa.

You have the option of dealing directly with the Chinese Consulate [www.china-embassy.org](http://www.china-embassy.org), or using a visa service company. The information at the Website of the Consulate is challenging to understand so I would strongly recommend that you use a service company. One that I've used is Travisa Visa Service [www.travisa.com](http://www.travisa.com). A Web search will show other options. Be sure to allow several weeks for the process.

IPS general information, membership information and 2014 IPS conference details are available at [IPS-planetarium.org](http://IPS-planetarium.org)

See you in China!

## Paul Campbell Fellowship Award Nomination Form

Nominees must have been a member of SEPA for at least ten years, and they must display qualities in each of five areas, as represented by the five-pointed star shaped award: integrity, friendship, service, knowledge, and vision. Please submit this form to any SEPA Council member.

Nominee's Name: \_\_\_\_\_

Qualifications: \_\_\_\_\_

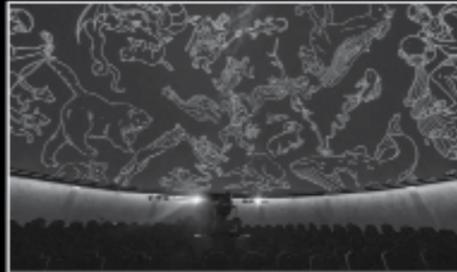
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# The HYBRID Revolution in Brno



The city of Brno can be found in the Czech Republic – the heart of Europe – about halfway between Prague and Vienna. A small observatory, used by world famous Czech astronomers was established here in 1954. For example Lubos Kohoutek, the discoverer of the well-known comet, and Lubos Perek, the co-founder of space law concerning satellite traffic were early members. It is also the place where Vladimir Remek, the only Czechoslovak astronaut, started his career in 1962.

Built in 1991 by the City of Brno, the Brno Observatory and Planetarium underwent substantial reconstruction in 2010 and 2011, and in 2013 installed a new GOTO HYBRID Planetarium® as an international joint project of the Czech company Nowatron Elektronik, French RSA Cosmos and Japanese GOTO INC.



Today the Brno Observatory and Planetarium is the largest and most modern institution of this kind in the Czech Republic. It cooperates with local universities and scientific companies, and is a co-founder of the Czech Association of Science Centers. Every year the planetarium has had more than 100,000 visitors who are looked after by 20 employees and about the same number of volunteers.

It reopened on October 31, 2013, with a GOTO Chronos II opto-mechanical planetarium projector synchronized with full-dome video. The reason for choosing the GOTO HYBRID combination was easy: It presents high quality astronomical shows effectively and at the same time can also be used for other educational and cultural activities. Director Jiří Dušek says, "We do not consider the installation to be just a planetarium but a wonderful audiovisual instrument with almost unlimited possibilities."



The 17-meter dome's 188 seats have been filled with an incredible 12,000 visitors in the first month of operation. We wish The Brno Observatory and Planetarium even more success in the years to come.

Photos credit: Brno Observatory and Planetarium



To learn more, contact:

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# Editor's Message

Submission deadlines: January 1 (Winter), April 1 (Spring), July 1 (Summer), October 1 (Fall).

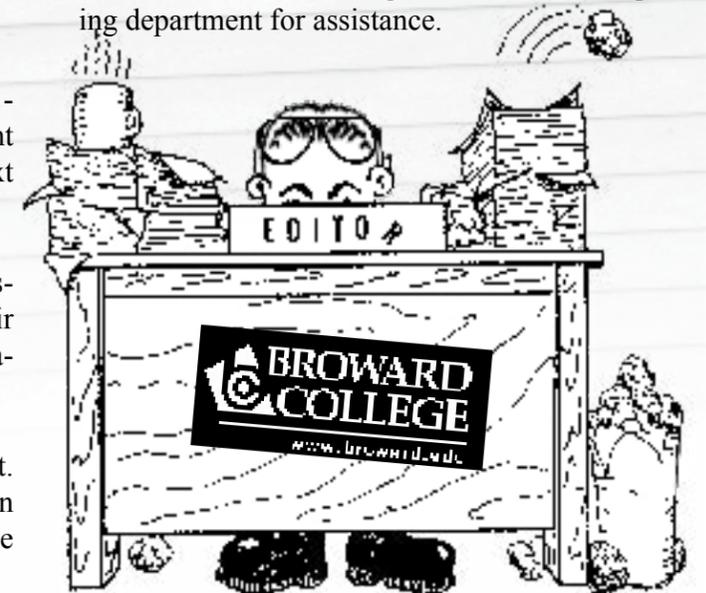
**James Sullivan**  
**Buehler Planetarium & Observatory**  
**Davie, FL**

Thanks to Broward College and its wonderful printing department for assistance.

As you noticed, this journal is smaller than usual - by about half. If you don't send it, we can't print it. Hopefully, this will mean a nice long issue next time.

I want to thank all our vendors who are advertising in our journal. I appreciate know about their products, and their continued support of our organization.

We can receive electronic files in most any format. Also, graphics can be received electronically or in hardcopy, including slides or photos, and will be converted to digital with sufficient resolution.



## SEPA Membership Form

Please send your check to SEPA, c/o Patsy Wilson, 140 Lyn Road, Salisbury, NC 28147

\_\_\_\_ One Year, \$25 (\$15 outside SEPA geographical region)

\_\_\_\_ Two Years, \$40

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Organization \_\_\_\_\_

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Staff Position \_\_\_\_\_

IPS Member? Yes \_\_\_\_\_ No \_\_\_\_\_

Contribution to Scholarship Award Account: \$ \_\_\_\_\_

# Small Talk

Elizabeth Wasiluk  
Berkeley County Planetarium  
Hedgesville, WV

Hey everyone. As I write this, I can see Christmas in the wings, it is right there, see, not here yet, but close enough to see. Exams reign supreme here at Hedgesville. Astronomy student Nick is out with a football injury and he will have to make up stuff, a daunting task. Astronomy student Megan isn't fretting about exams and maybe she should, as she did lousy in the review session today on Saturn. She did much better on pulsars. Speaking of pulsars, the pulsar search team is absent without leave. Maybe I may see them tomorrow, maybe not. Me, in my spare time, what infinitesimally small amount of it I have, I am reading John Shea's Starlight, a book about Advent and getting ready for Christmas ([http://www.amazon.com/Starlight-Beholding-Christmas-Miracle-Year/dp/0879463139/ref=sr\\_1\\_1?s=books&ie=UTF8&qid=1387394069&sr=1-1&keywords=john+shea%27s+Starlight](http://www.amazon.com/Starlight-Beholding-Christmas-Miracle-Year/dp/0879463139/ref=sr_1_1?s=books&ie=UTF8&qid=1387394069&sr=1-1&keywords=john+shea%27s+Starlight)) and when I can listening to 'Winterscapes' (<http://www.live365.com/index.live>) an on-line music streaming station with a winter/Christmas theme steeped in new age, instrumental, folk and frosty ambiance. Unfortunately it is scheduled to go off of the air come December 31st 2013 if not enough people contribute to their fund raising to keep it off the air. After ten years, they only need \$406.00 left to keep it on the air. Hope they succeed, or like my search for e-cards to replace the Chandra X-Ray Telescope ones that have been discontinued, I will be left high and dry.

Anyway, getting back to the John Shea book, Starlight, there is a chapter in there called "The Close and Holy Darkness" about how much we try to avoid this, even though Christmas is a joyous time, we are haunted by those who have left us. So it is with me. Hearing of the passing of Gary Meibaum, it deeply saddened me that I will not see him at future SEPA conferences. Gary was a peach of a guy. Out of the blue he gave me this wonderful tape of crick-



ets chirping that I still use in the planetarium. I just saw him at Baton Rouge doing wheelies in his little cart. I should have known something was up when he said his heart just can't take it anymore. I dared not ask why. Gary was part of that weird N'Orleans triumvirate once made up of Mark Trotter, now at Bowen Technovation and the late Mike Saunders. We all went once to see a show at the Kelly Planetarium in Charlotte, North Carolina. I never laughed so hard sitting with those guys. We kept marveling at the fact that we could put like twelve of our little domes in that place. That was when Sue Griswold was there. She is no longer with us anymore either. Anyway, the book Starlight talks about how even though Easter might seem like a more appropriate time, it is Christmas when we are haunted by people who have gone before us. It is like watching the DVD that my cousin Brian sent me that shows my mother, grandparents and godfather still young and alive and celebrating Christmas with tiny little preschool me. My friend Cathrine is still with me and I am waking up Christmas morning in Canada. All people gone, but very much with us.

I don't know about you, but I was anticipating seeing another great comet in the sky and actually did a pre-ISON program in the planetarium in early November to a huge crowd, due to a front page newspaper article with picture in full color. It was inspiring, but difficult to work in an over capacity crowd. There were people there who could not care about comet ISON, but wanted to see me because they were friends and hadn't seen me in a long while because I have been spending too much time in the dome.

My astronomy student, Nick had predicted that ISON would disintegrate after reading the prediction of the gentleman from Argentina on the web who said he thought that ISON would break apart.

(Continued on page 11)

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Photo courtesy of Loupheim Planetarium.

*Ask us for a demonstration in your dome!*

*Small Talk (Continued from page 8)*

Still I was quite surprised to hear that it disintegrated when passing near by the sun after coming back from serving Thanksgiving Dinner at my church. Surprising in that astronomy holds mysteries, even from professional astronomers. But I guess, if it had to disintegrate, what a way to go with the Solar Dynamics Observatory (SDO), Stereo and Solar and Heliospheric Observatory (SOHO) watching it. Heck, ISON had to be the most observed comet breaking apart in history with all the spacecraft watching it. Many friends took lovely pictures of it when it was in the sky, along with morning comet companions Encke, Lovejoy and LINEAR which went through an outburst.



So was ISON a total bust for you, or did your dome benefit from the publicity? Drop a line and let me know what went on in your dome and maybe some preparations you plan on



*Comet Ison, Nov. 13/14, 2013, Conrad Jung, Chabot Observatory, Oakland, CA.*

doing for 2014 with the upcoming lunar eclipse on tax day.

*page 11*

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**Patsy Wilson**  
**Margaret C. Woodson Planetarium**  
**Salisbury, NC**

## 2013 Year End Financial Report

*Southeastern Planetarium Association*  
 Submitted by Patsy Wilson  
 December 31, 2013

All funds held at Branch Banking and Trust Company, Chapel Hill, North Carolina.

### Balances as of 12/31/13:

Operating	23,923.66
Savings	25,647.69
Scholarship	<u>5,753.56</u>
Total	55,324.91

### Operating Account

Balance (as of 1/1/13)	<b>24,753.68</b>
Income:	
Full Membership	1,680.00
Associate Membership	180.00
Journal Ads	3,718.00
PD Fund Donations	627.37
Transfer from PD Fund	2,000.00

Total Income	<b><u>8,205.37</u></b>
Total credits	<b><u>32,959.05</u></b>

Disbursements:	
Journal (four issues)	2,248.54
Awards & Plaques	127.30
USPS-Shipping Cost	15.05
Service Charge	22.00
<i>(Wire Transfer)</i>	
PD Fund	160.00
<i>(Transfer of 2012 donations)</i>	
John Hare	1,165.13
<i>(IPS Travel Reimbursement)</i>	
Seminole State	3,000.00
<i>(14 Conference Seed Money)</i>	
Holiday Inn	100.00
<i>(Deposit for 15 Conference)</i>	
4 Professional Development Awards	1,570.00
PD Fund	627.37
<i>(Transfer of 2013 donations)</i>	
Total Debits	<b><u>(9,035.39)</u></b>
<b>Balance (as of 12/31/13)</b>	<b>23,923.66</b>

<b>Savings Account (as of 1/1/13)</b>	<b>25,609.24</b>
Interest earned	<u>38.45</u>
<b>Balance (as of 12/31/13)</b>	<b>25,647.69</b>

<b>Professional Development Scholarship Account (as of 1/1/13)</b>		<b>6,966.19</b>
Income:		
2012 Individual Donations	160.00	
2013 Individual Donations	125.00	
Proceeds from Silent Auction	<u>502.37</u>	
Total Income	787.37	
Total Credits:		7,753.56
Disbursements:		
4 Professional Development	(2,000.00)	
<i>(4 @ \$500.00)</i>		
<b>Balance (as of 12/31/13)</b>		<b><u>5,753.56</u></b>

*President's Message (Continued from page 4)*

dome's projected sky. Poor ISON, I had to disintegrate its virtual cousin, too.

We had high hopes for ISON with memories of Hale Bopp. We'll just have to wait for the next one, especially if there is a catered meal involved!

## COVER PICTURE

**Suresh Atapattu**  
**Buehler Planetarium & Observatory**  
**Davie, FL**

Caption: United Launch Alliance's Lockheed Martin Atlas 5 in configuration AV-029 carrying

the JUNO spacecraft and on its way to Jupiter. The ULA Atlas V rockets of the pad in a shower of flames, smoke and ice from Space Launch Complex 41. The first few seconds of a six year science mission.

In the future, this rocket will be taking humans into space. Reports of the death of the American space program are greatly exaggerated!

Location: Cocoa Beach - Cape Canaveral Air Force Station Skid Strip (XMR / KXMR), USA - Florida,

Date: August 5, 2011

This picture was taken using 35mm Fuji Velvia 50 slide film with a 50mm lens on a sound-activated Minolta X-700 bought for \$40 on eBay!

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# News From SEPA Region

## FLORIDA

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### Florida Planetarium Association (FLORPLAN)

FlorPlan is meeting February 22 at the Hallstrom Planetarium, Indian River State College.

### Buehler Planetarium Broward College Davie, FL

Susan J. Barnett reports: The Buehler Planetarium & Observatory is running public shows four days a week. The weekend shows and monthly specials include *Infiniti Express*, *Earth, Moon & Sun*, *Discovering Distant Worlds*, *Native American Skylore*, and *Eyes on Mars*. In addition, on Wednesday evenings we do our live sky tour, *Stories for a Starry Night*.

The Buehler Observatory has viewing four times a week. It has free public observing Wednesday, Friday, and Saturday evenings. In addition, we observe the Sun on Wednesday afternoons. We usually have one telescope set up to view sunspots, and watch flares through a Hydrogen-Alpha filter on another.

### Miami Space Transit Planetarium Patricia and Phillip Frost Museum of Science Miami, FL

Claudia Hernandez reports: Greetings fellow SEPA-ians! Our planetarium has not reported for a while and we hope to make that up starting with this issue. We are excited to be back and report all of the new happenings from the Miami Space Transit Planetarium at the Patricia and Phillip Frost Museum of Science, formerly known as the Miami Science Museum. We have recently changed our museum name in preparation for our big move to a new facility in 2015. If you would like to see our building's progress, or learn a bit about our new home, type the following link into your web-browser:  
<http://www.miasci.org/blog/future/live-construction-camera>

While our new museum undergoes construction, we will continue to run our public show schedule seven days a week and accommodate all visiting school groups. Currently we are presenting for the public: *Two Small Pieces of Glass: The Amazing Telescope*, *Nine Planets and Counting*, *Legends of the Night Sky: Perseus and Andromeda*, and our live star lecture *How to Find the Stars and Planets of the Month*. In addition to our regular schedule, we have our *Fabulous First Fridays* every first Friday of the month; a night jammed packed with our music laser shows, a free star show, and observatory viewing!

Look for us in the upcoming issues for more updates; and as our late director Jack Horkheimer would always conclude, keep looking up!

## GEORGIA

contact: David Dundee  
Tellus Museum  
Cartersville, GA  
[DavidD@tellusmuseum.org](mailto:DavidD@tellusmuseum.org)



### Fernbank Science Center Planetarium Atlanta, GA

April Whitt reports: Fernbank Science Center survived the cold weather! We're developing "Fern-

bank Experiences" - multiple classes for a visiting school, incorporating the new fulldome programming in the planetarium along with offerings by other instructors. Wizard Tech Forrest Wilson is adapting some of our slide-based school programs for fulldome technology. They have been well-received by our visitors.

December's *Stories Under the Winter Stars* was great fun, and a good audience turnout. *The Mole Family's Christmas*, a children's story by Russell Hoban, was a hit.

We're looking forward to a spring full of special events, both in and out of the dome. Clear, dark skies, everyone!

### Planetarium Tellus NW GA Science Museum Cartersville, GA

David Dundee reports: It has been a busy fall and early winter for us. We premiered "To Space And Back" and a new Christmas show "Star of Bethlehem" produced in Greece. We brought back "Molecularium" for our younger visitors. The big planetarium news is that we ordered a new planetarium projector; we are upgrading to a Media-Globe III. We are excited about that. Tellus put its new Moon rock on display. This one was recovered by Apollo 15 and it is very pretty. It has small crystals of olivine and pyroxene. We also put a Lunar Sample Return container and Apollo Rock Hammer on exhibit. Plus, we have an Apollo Lunar Module ascent engine that went on display along with our Moon rock. We are hoping for clearer skies in 2014 since many of our observatory events in 2013 were observing clouds.

### Georgia Southern Planetarium Georgia Southern University Statesboro, GA

Becky Lowder reports: We upgraded to Digistar 5 last year and will be covering Mars and the total lunar eclipse in April. Dynamic Earth and Richmond have been added to our presentations. Using the planetarium to teach university students and

giving free school shows.

## NORTH CAROLINA

contact: Woodrow Grizzle  
ECSU Planetarium, Elizabeth City, NC  
[woodrow.grizzle@gmail.com](mailto:woodrow.grizzle@gmail.com)



### Robeson Planetarium and Science Center Lumberton, NC

Ken Brandt reports: By the time you read this, we will be preparing and or executing our events for the NC Science Festival. These include a star party, and a teacher workshop for Mars Exploration uses in the classroom. This event is organized and run from our good friends at the Morehead Planetarium and Science Center in Chapel Hill, NC, and I am thankful to them for taking the lead in this extremely successful event, now in its 3rd year.

We have seen over 7,500 children and teachers this school year thus far-every student in grades 3,4,5,6,9 (plus many additional classes and groups) in our district attends the planetarium and science center. For many of these kids in our economically depressed area, this is the only school-related trip they go on and as you might guess, we try to make it a safe, happy, and fun learning experience for them.

Cleveland enjoys a flawless record driving our bus, and Joy makes sure that they get here when there supposed to be here. I am very fortunate to have two professionals helping me to run the best darn planetarium in the world! (Please, no hate mail.)

Of course, we plan an event to coincide with the lunar eclipse, and will have telescopes plus live streams of the event on the dome in the probability of cloud cover here in the southeast.

On another note, here's a question that I will ask again at SEPA in Orlando: How many planetariums do you have within a 50 mile radius of your place? Of those, how many are SEPA members? I have two, and neither are members-yet...

## SOUTH CAROLINA

contact: Gary Senn  
DuPont Planetarium, Aiken, SC  
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### DuPont Planetarium Ruth Patrick Science Ed. Ctr., USC Aiken Aiken, SC

Gary J. Senn reports: The DuPont Planetarium at the Ruth Patrick Science Education Center (RPSEC) on the campus of the University of South Carolina Aiken (USCA) enjoyed a successful Christmas season with its annual presentation of *'Tis the Season (Season of Light)* from Lochness Productions. The RPSEC observatory housing the Bechtel Telescope is open on Saturdays after planetarium shows, weather permitting. Amazingly, the last three months of 2013 were cloudy almost every Saturday, so the observatory had less use than normal.

In January, we presented *Ancient Sky Lore*. This live presentation takes the visitors to the planetarium on a tour of the heavens as we discuss the history of constellations from a variety of cultures. We also showed, *Digistar "Laser" Fantasy*, which is a local production.

In February, we will show *Follow the Drinking Gourd*, based on the program by the New Jersey State Museum Planetarium and the Raritan Valley Community College Planetarium. We updated the script somewhat to make it a little longer and to include some more astronomy. We also address some of the concerns that others have expressed about the accuracy of the facts in the show surrounding the song and the Underground Railroad. Also in February, the planetarium will present *The Explorers of Mauna Kea* produced by the Bishop Planetarium in Hawaii for student groups who visit the planetarium.

In March, the planetarium will offer our local production, *Mission to Mars* as well as another opportunity to experience the live show, *Ancient Sky Lore*.

## TENNESSEE

contact: Kris McCall  
Sudekum Planetarium  
Nashville, TN  
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### Bays Mountain Planetarium Kingsport, TN

Adam Thanz reports: Greetings Fellow Planetarians!

As I write this, we are only days away from premiering our latest in-house, full-dome production, "Discover the Stars." It was written by Jason Dorfman and I, but it really is Jason's show as he has done the lion's share of the work. As you can guess, it is about stars. It covers what they are, where they come from, how they die, and how they are part of constellations. We also relate the viewer to the stars in helping them understand how we see stars and



The poster to our latest full-dome show production, "Discover the Stars."

what causes them to twinkle, have different brightnesses, and different colors. As we've done in many of our shows, we've designed a live component to include in the show to personally engage the audience and to enhance the learning environment. By the time you read this, the show will be available for world-wide distribution. This show will be run in our theaters for the spring as our main program.

Our secondary program that is offered at 2 p.m. on the weekends is currently our live star program, "Appalachian Skies - Winter." Then in March, that show will be replaced with another one of our in-house productions, "Under the Milky Way."

When I last wrote, we were hoping for a nice apparition of Comet ISON (C/2012 S1). Alas, it was not to be. I was able to see it easily with binoculars, but it didn't flare up post perihelion. Still, a great show and wonderful opportunity to teach about what can happen to comets and that they are dynamic objects.

I also last wrote about our upcoming 30th Anniversary of StarFest back in October 2013. It has come and gone, and was a great event. Everyone had a great time and enjoyed all the great speakers, food, goodies, and camaraderie.

The last thing I'll write about is our latest exhibit installation. They are program kiosks. They are monitors that display the day's public programming along with other stills and video. The display alternates the schedule with the other content and the entire collection is then looped throughout the day. Unfortunately, it does not create the content automatically. But, I've designed it to be easily modified for each day. I use Apple's Keynote to create the looped presentation. It gives a really professional look to the presentation. I also use Calendar to open the right Keynote file each day. For other controls like stopping the presentation and closing the Keynote file for the day, I use Automator to make scripts that Calendar runs each day.

Every few months, I will create the upcoming three to four months worth of presentations with each day having its own unique schedule. There is a 32" HDTV monitor above our gift shop (where we sell our tickets) to let our visitors know what is offered for that day, the cost, and the times. There is a larger,

55" HDTV monitor that will be inside a large case that is just inside the main entrance doors to really emphasize our programming. Both monitors are set vertically (portrait mode). The one at the gift shop shows the schedule for thirty seconds and the other stills are shown for three seconds. This way, the display is dynamic, but emphasizes the schedule and allows visitors to read the content. The large display at the main entrance has each "slide" up for ten seconds since its purpose is to highlight what our Park offers in general. I think it really helps our visitors know what is going on and promotes the Park as a vibrant facility.

Saturday, Jun 7, 2014			
Time	Program	Cost	Member
8:30 a	Park Opens	-	-
10 a	Wolf Howling	free	free
11 a	Barge Ride	\$3	free
12 p	Nature Center Opens	-	-
1 p	Planetarium - "Back to the Moon"	\$4	free
	Barge Ride	\$3	free
2 p	Planetarium - "Appalachian Skies - Spring"	\$4	free
	Barge Ride	\$3	free
3 p	Solar Viewing - only if clear	free	free
	Dining with the Wolves	free	free
4 p	Planetarium - "Back to the Moon"	\$4	free
5 p	Planetarium - "Back to the Moon"	\$4	free
	Barge Ride	\$3	free
7 p	Nature Center Closes	-	-
8 p	Park Closes	-	-

An example of a summer day's programs with times and costs. Listing the free member cost will help promote Park membership. Listing when the main Nature Center and Park opens and closes is helpful, especially with hikers that may want to stay out too long on our trails.

Learn about the night sky with  
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- BMAC Club meetings the first Friday of most months - free
- SunWatch - free
- StarWatch - free
- Astronomy Day (Spring) - free
- StarFest (October) - pre-register with payment

An example of an informational slide on our program kiosk.

**Sharpe Planetarium  
 Memphis, TN**

Dave Maness reports: In all of the distractions of the holidays, I almost forgot about the first News from SEPA States article of the New Year. It usually sneaks up on me, but this one was particularly sneaky. To recap the planetarium operations of the fall season, we began with a run of the entertaining program *WSKY: Radio Station of the Stars*. I had thought that we would be renovating soon and I wanted to go out with a program that I knew would be hard to forget. I also ran the more traditional seasonal production *Autumn Nights*.

The Pink Palace Family of Museums reopened the second of two Historic Properties that we manage

in Memphis. The Magevney House is a white clapboard cottage built in 1830 to house Memphis' first permanent schoolteacher, an immigrant from Ireland. The house is open for free visitation from 1:00 to 4:00 p.m. on the first Saturday each month. Plan your vacations accordingly.



In just a few short weeks, the weather turned from pleasant to cold (and sometimes rainy) just in time to bring in the *Wonders of a Winter Night* program and the holiday favorite *Star of Wonder* whose run closely corresponds with the holiday season. It has a short run and has been replaced by *Oceans in Space* for the winter months of 2014.

For my Holiday vacation, I visited my nearest relative, a sister who lives just northwest of Topeka, Kansas. One cold day we drove just a few miles to the site of the Banner Creek Science Center. It had a notice that said "open for observing every Saturday night weather permitting." Just in case we couldn't make the observing session, I photographed it from the outside.



Unfortunately, on the only Saturday that I would be there, the Director claimed that the weather forecast was predicting a chance of freezing rain or something like that and so he would not be open. Granted it was cold with temperatures in the teens, a little uncomfortable for an observing session. Later, I caught a photo of Venus over a salmon-pink sunset that night. I only had my cell phone camera and I'm not sure how well the photo will look in black and white. I also admit that I had to photo-shop the former blob that was Venus.



At least it proves that the weather was not as bad as the Director of the Science Center had feared.

Lastly, after a wait of several months for the paperwork to move through the system, I was permitted to hire a new part time staff member to fill a position that has been open for nearly a year. She is Kelsey Moody, a Memphis native who served as an intern for me a couple of summers ago. She recently graduated from Mount Holyoke University with a degree in astronomy.

**VIRGINIA**  
 contact: Kelly Herbst  
 Virginia Living Museum  
 Newport News, VA  
 Kelly.Herbst@thevlm.org



**Abbitt Planetarium  
 Virginia Living Museum  
 Newport News, VA**

Kelly Herbst reports: Happy 2014! The end of the

year really snuck up on me...I can't believe 2013 has already gone the way of the dodo.

As I write this, it's almost time to fire up the theater and prepare for the first three shows of the new year. We're opening with *The Friendly Stars* for the pre-school set – a favorite amongst the little ones. For adults, we're offering *Dark*, a program exploring our understanding of dark matter and the need for the ASKAP telescope array in Australia. A full-dome freebie, it's quite visually stunning and one of the few full-dome shows I've seen that makes use of a live narrator frequently visible on the screen. We'll round it all out with our live show, *Virginia Skies*, as always.

The holiday season was busy with many happy families, and lots and lots of tour groups. No snow, but plenty of smiling happy faces!

February will bring numerous special events and home-grown shows...Groundhog Day, featuring our popular *Assignment: Earth* program starring one of our museum's groundhogs... Valentine's Day laser shows...and the always well-attended Reptile Weekend, featuring our fun planetarium game show *A Sky Full of Scales*. Never a dull moment, that's for sure. March sees the return of our traveling exhibit of Charlie Harper artwork, which will be displayed until it is retired in May. In the theater, we'll bring back its companion program, *The Art of Hubble*, a home-grown show about how the HST produces its amazing images.

I'm still working hard on *Stacey Stormtracker*, with a deadline of March 1 to have it up and running in the theater. It's coming along nicely. After that... who knows?

Have a wonderful and star-filled 2014!

Any Virginia planetarian with news to share with SEPA should contact Kelly Herbst at [kelly.herbst@thevlm.org](mailto:kelly.herbst@thevlm.org) or 757-595-1900 ext. 256

**Pretlow Planetarium  
Old Dominion University  
Norfolk, VA**

Declan De Paor reports: ODU's Pretlow Planetarium had their highest attendance ever for their Fall show "Escher's Universe" — a very unusual combination of astronomy and art. (<http://vimeo.com/64135343>). The planetarium offers free shows to the public on Tuesdays and Thursday at 6:00 PM during the semester. For details, see [www.odu.edu/planetarium](http://www.odu.edu/planetarium).

Josh Frechem is an ODU undergraduate who works as a Teaching Fellow with the Pretlow Planetarium—he takes care of our scopes. He was chosen with five others for a "research experience for undergraduates (REU) at Cerro Tololo Inter-American Observatory this Spring. Here's his email to me:

"The REU is held at Cerro Tololo Inter-American Observatory where I, five other Americans, and two Chileans will work alongside professional observers at the observatory. We get to visit ESO's Very Large Array on Cerro Paranal as well as do an observation on one of the telescopes on Cerro Tololo. We get to learn how the data is taken, how the equipment works, as well as analyze data on the project we choose upon arrival and meeting of our mentor. It lasts from January 13th to March 21st (but I will most likely stay longer since they invite us to stay as long as we want). The goal of the REU is to provide professional experience to students hoping to pursue a career in astronomy/astrophysics and have a published abstract/paper by the end of the program."

Pretlow Planetarium held two public outreach events at Virginia Beach. The first was this sunrise eclipse: <http://www.odu.edu/about/odu-publications/insideodu/2013/11/07/feature1>. The second was our attempt to view Comet ISON. We spotted it and saw the green coma but it was not quite the comet of the century! (Sorry, no photos.)

The first day that they went on sale, we ordered an Apple Mac Pro. as our main planetarium workhorse. The ability to process our own 4K digital masters will be significant for us.



Best wishes, happy New Year.

**WEST VIRGINIA**

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Buckhannon, WV [delaney\\_t@wvwc.edu](mailto:delaney_t@wvwc.edu)



**Planetarium  
West Virginia Wesleyan College  
Buckhannon, WV**

Tracey DeLaney reports: We were fortunate to receive some Space Grant EPO money to develop shows that specifically target the elementary level astronomy science standards. Our new student assistant will be tasked with this project come May and June of 2014. We offered two shows during homecoming this year and they were a big hit. We've been actively lobbying for donors to help fund the cost of a new digital projector. School group business is always slow during Fall semester (only one 5th grade class has come through), however business usually picks up in the spring.

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