

Southern Skies

Volume 31, Number 3

Journal of the Southeastern Planetarium Association

Summer 2011



SEPA
2011

O. Wayne Rollins Planetarium
Young Harris, Georgia

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President's Message

April Whitt
Jim Cherry Memorial Planetarium
Atlanta, GA

What a great conference! Our gracious host(s) Steve and Debbie Morgan have set a higher bar for a smooth running, informative meeting with a smile. Two smiles!

It's difficult to choose a favorite part. The excellent papers and workshops? The generous vendor support and presentations? Welcoming new members? The road trip to Tellus? The constellation shoot-out complete with live music by Jonn Serrie? The lovely scenery and extraordinary service at Brass-

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

Rates	Dimensions
\$100. high	Full-page 7" wide x 10" high
\$50. high	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 entire back 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.

town Valley Resort? The tribute to Jack Horkeimer at the banquet? The fascinating invited speakers? The Woodchuck-filled hospitality suite? The woodchuck at the resort? A silent auction of galactic proportions? Selection of Jacksonville, Florida for the 2013 conference? The delicious food? Winning a door prize? The snake at the barbeque? Jason Dorfman's rescue of the audience from certain death in the rings of Saturn?

Many, many thanks to the vendors and helpers who made this conference possible. Find their ads elsewhere in this journal, and drop them a thank-you e-message.

And thank you! to John and Linda Hare for a new tradition. Jack Horkheimer's jacket, the very one worn by the Stargazer himself on his last broadcasts, was one of the auction items. The winning bidders are having the jacket mounted in a conservation frame, and are donating it as the SEPA conference site hand-along. Thanks to George Fleenor's idea, the next conference hosts will have the jacket for display during the year they prepare our next meeting.

For 2012, that would be Jon Elvert. Our long-suffering past-president is arranging a mini-SEPA meeting just before the IPS conference in Baton Rouge July 22-26, 2012. We will meet the Saturday before (July 21) and Sunday morning (July 22), wrapping up in time for the IPS opening reception that evening. And Jon has announced that there will be

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SEPA President April Whitt

IPS Report

John Hare
ASH Enterprises
Bradenton, FL

I represented SEPA at the IPS off-year Council meeting. The 2-day meeting was held in Nizhny-Novgorod, Russia and took place in conjunction with the Russian Planetarium Association conference. On our third day in Nizhny we were able to join our Russian colleagues in translated sessions. The Russian planetarium community is healthy and growing and we saw evidence of that in both Nizhny Novgorod and at the just-reopened Moscow planetarium. A tour of Star City, the Russian cosmonaut training facility and museum took place between the above mentioned visits.

The most significant decision by the IPS council was the selection of the 2014 IPS conference. Beijing, China edged out Rio de Janeiro and Vancouver. The announced conference dates are June 23 thru June 27. If SEPA meets in our usual time frame during the third week of June, then the SEPA con-

ference would end on Saturday June 21 just 2 days before IPS. Not only would this make it nearly impossible for delegates to attend both conferences but, just as importantly, vendors would not be able to attend both. Given the choice, vendors would likely attend (and support) IPS. We are only a year out from deciding on our 2014-conference site and dates. I'm sure SEPA Council would appreciate your input and suggestions.

This fall the bi-annual IPS Directory and Resource Guide will be updated and distributed to all IPS members. Regardless of whether you're an IPS member or not, if there are any changes in your listing they should be communicated to IPS publications chair, Dale Smith dsmith@newton.bgsu.edu. This includes addresses, equipment, personnel, and other data.

As always, don't hesitate to contact me about anything concerning IPS.

Editor's Message

James Sullivan
Buehler Planetarium & Observatory
Davie, FL

What a great conference! Anyone who has done a conference knows what hard work it is. To pull it off and make it look so easy is a testament to Steve's hard work, along with all his helpers. From where I sat, this conference was absolutely perfect. Thanks again to Steve, O. Wayne Rollins Planetarium, and Young Harris College.

We are a little light in this issue on our *News from SEPA Regions*. I know this time of year we are either recovering from the SEPA conference or out on summer break, so it is understandable. However, I hope for our next issue that you send in something to your State Coordinator. And as always, we'd love to see that article, or a few of you said you could send in articles based on your paper presentation.

We look forward to seeing these.

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.

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

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



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: _____

SEPA Membership Form

Please send your check to SEPA, c/o Patsy Wilson, Margaret C. Woodson Planetarium, 1636 Parkview Circle, Salisbury, NC 28144.

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

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Small Talk

Elizabeth Wasiluk
Berkeley County Planetarium
Hedgesville, WV

During the second from the last shuttle launch, three of my students sent a picture of themselves on board the space shuttle for both the second and third from the last space shuttle launched. This was part of the “Your Face In Space” program. Go here for details: <https://faceinspace.nasa.gov/index.aspx>
They received a certificate from NASA signed by the commander of each launch.



HHS Astro Class

Speaking of the shuttle, it was great to see the all skies taken by George Fleenor of GeoGraphics Imaging, second from the last ever space shuttle launch and landing at the SouthEastern Planetarium

Association (SEPA) conference at Young Harris, GA. If you weren't able to go to the SEPA conference you might like to contact George to see these and get to use them. I heard the word “free” bantered about, so if you are a “small planetarium” in the budget area, and need a shuttle all sky, (they are beautiful!) ask George about them. His email is geographicsimage@aol.com.



Josh Dudenhoefer tries to fly the shuttle

Before I get to my “small planetarium” spin on the SEPA conference, I would like to tell you about my end of year activities, sort of my list of things leading up to going to the SEPA conference.

The team leader of our pulsar search group, April Liska and team leader in training, Josh Dudenhoefer came with me to the Central Pennsylvania Astronomers meeting at



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Small Talk (Continued from page 6)

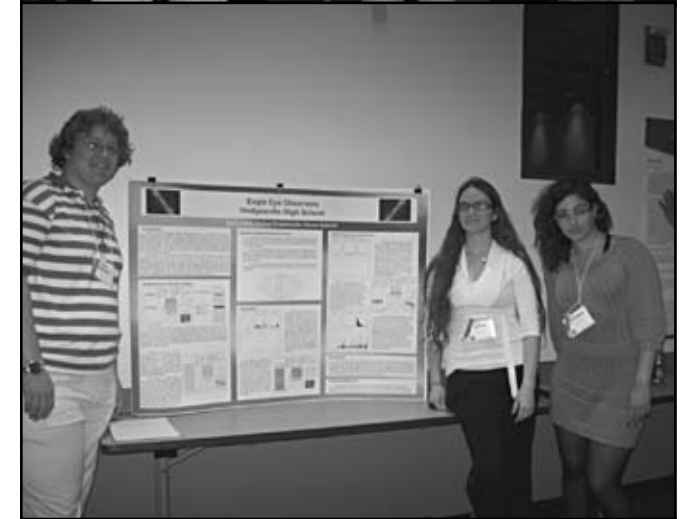


At CPAM - Central Pennsylvania Astronomers Meeting

Franklin and Marshall College in Lancaster, PA. Steve Berte and Don Williams of the Tri-State Astronomers also came along. They both have their own observatories in their backyard. Don dabbles in video astronomy and you can often see and hear him on the astronomk website: <http://theastronomk.blogspot.com/>

Anyway, my pulsar search students went to see Duncan Lorrimer, the pulsar search astronomer that the students work with on the program, since he was the invited speaker. There were also good talks on black holes in galaxies detected using the Chandra X-Ray Telescope and on Mayan Astronomy. Duncan even mentioned my students in his talk as they wore the tee-shirts they won from the marathon by looking at the most pointings from the Robert C. Byrd Green Bank Telescope over a given amount of time. A pointing is using the telescope to look around a given point in right ascension and declination, due to the beam width being so small. This allows us to zero in on a potential pulsar target.

Speaking of pulsar search, I also took the students that got fifty pointings done and who collaborated on a poster paper about their research, to West Virginia University in Morgantown, WV. We in pulsar search call this the “Capstone” event. Students from around the county attend and present their research in a poster paper. They also tour the college and take part in activities sponsored by the Science and Engineering Departments. Students rode the Personal Rapid Transit (PRT) cars to get around and



Hedgesville Team



Personal Rapid Transit (PRT)

took part in a catapult building and launching competition as well as a building competition using 3” x 5” index cards along with paper clips. The Hedgesville team won a certificate for winning the marathon and having looked at the most pointings overall of all teams participating. Individual students Josh Dudenhoefer got a certificate for coming in third overall in the marathon and April Liska got one for her contributions in being a team leader for

(Continued on page 14)

Archeo- astronomy

Cross-Referenced: Cross-quarter Days Then and Now

Part IV: Lughnasadh

Woodrow W. Grizzle III
Elizabeth City State University Planetarium
Elizabeth City, NC



Theros: summer personified. A.D. 2nd-3rd century. Floor mosaic, glass and ceramic tesserae. House of the Drinking Contest, Antioch, Syria. Virginia Museum of Fine Arts. 2010.



*Now the summer sun doth bake
the ground and creepy-crawlies quake,
Giving gardeners pain and ache
from tomatoes, beans, and squash
those little bugs ate.*

Finally, we have come to part four in a four-part cycle on the illustrious and little-referenced cross-quarter days. Before we know it, our planet will return to the equinox of September, when our little jaunt began. But, before that time, a few words about Lughnasadh.

August 1st marks Lughnasadh, what many northern hemisphere folk (on the North American Continent, anyway) would call the cross-quarter day of summer. Nearly all folk might agree that it has the most elusive pronunciation of the four. There are mainly two ways to pronounce it correctly: the Old Irish *[loodth'-n?-sah]*, and the Gaelic *[loo'-n?-sah]*, in some sources *[loo'-n?-stahl]*. In every case, the name is simply that of the month of August. Lughnasadh marks the middle of astronomical summer, much as its three counterparts, Samhain, Imbolc, and Beltane, mark the middle of their associated astronomical seasons. It is the time that traditionally marked the beginning of autumn for the peoples of the British Isles and western Europe.

Anyone who has been keeping up with the three previous installments of the Cross-Referenced cycle

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Archeoastronomy (Continued from page 8)

already knows how the ancients celebrated this seasonal milestone. In a word: **bonfires**. Yes, you heard it right, bonfires. Nothing cheers the heart more than the thought of a toasty evening's bonfire after a long day in early August. I suppose August on Great Britain and Ireland is not quite the same experience as August in the SEPA region, but the thought of building an enormous fire after toiling in the fields in the middle of the summer still sounds less than comfortable. Ambient temperatures aside, these bonfires were lit and priests performed sacred rites to bless the fields, ensuring their continued fertility and the bounty therefrom reaped.



"Lugh's Magic Spear" Illustration by H.R. Millar. Public Domain.

The patron deity of Lughnasadh was Lugh, a god and high king of Ireland's distant past. The festival of Lughnasadh is said to have originated with Lugh's preparation of a funeral feast and games in honor of his adoptive mother. The honored-to-be

was a woman known as Tailtiu, who was said to have collapsed of exhaustion, giving up the ghost after clearing Ireland's plains for planting. This funerary festival was first known as *Áenach Tailteann*, and it is said to have occurred at a place called Telltown. *Áenach Tailteann* was a popular time for contracting marriages and for great tournaments of strength and skill. It is not inconceivable that these contests were showcases of male athletic prowess with the chief aim of attracting fair and eligible maidens into marriage contracts.

August has survived as a popular month for nuptials since that time. According to Hallmark Cards, August is even now the most popular month for weddings, surpassing June at the dawn of the 21st century.

A popular observance during Lughnasadh in antiquity and today is the practice of handfasting. This practice, relatively unknown in North America, is a traditional European betrothal ceremony. Guests to the festival bring ribbons to tie around the clasped hands of the happy couple into what quickly becomes a large and intricate jumble known as a handfasting knot. Though originally a public affair and official declaration of betrothal, today it is largely practiced in private ceremonies, and, in some cases, when public declaration is not desired or possible, as in the cases of pagan rites, multiple partner arrangements or like-gender couples.

Today, the festival of Lughnasadh continues to be observed. Bonfires are lit and dancing ensues. The Church even still blesses the fields. Even outside of the British Isles, people of Irish and Scottish descent often celebrate the festival of summer, though it is often shifted to coincide with summer holidays, such as the Fourth of July (in the U.S.A.) to accommodate modern work schedules and vacation plans. From August weddings to the blessing of crops, Lughnasadh, like the other cross-quarter days, has fingers that stretch into modern times in often surprising ways.

Bookends

Robin Byrne
Bays Mountain Planetarium
Kingsport, TN

Dragonfly: NASA and the Crisis Aboard Mir by Bryan Burrough

It's time once again to venture over to the ol' bookcase and find an astronomy/space book to review. This time, the book is "Dragonfly: NASA and the Crisis Aboard Mir" written by Bryan Burrough. This book is a little dated, having been published in 1998. However, it was written shortly after the events discussed in the book, so the information gleaned from interviews was fresh on the minds of all involved.

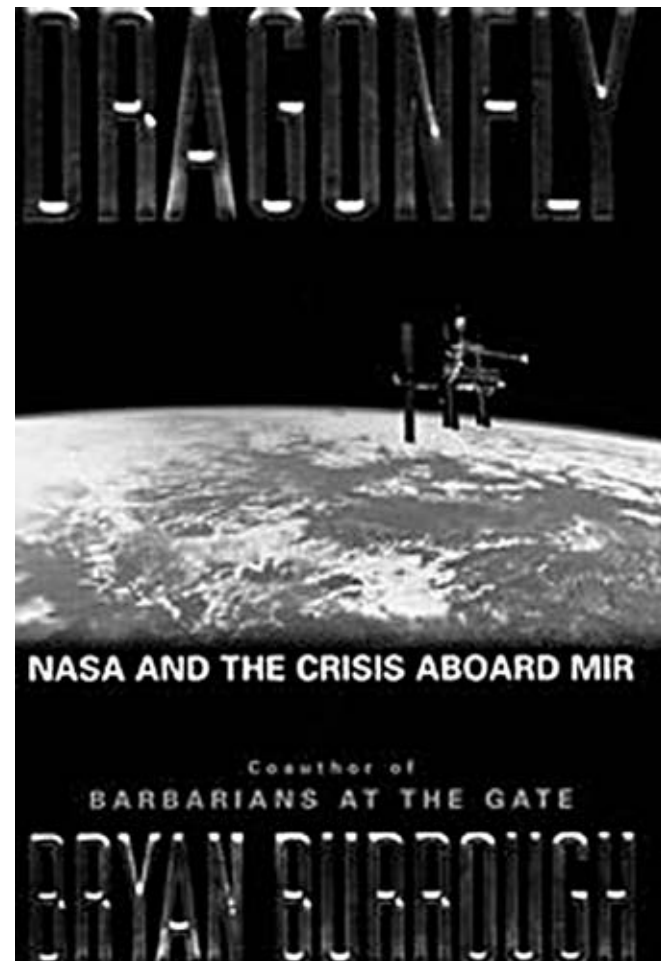
The time frame is 1992 to 1997. The Shuttle program seems directionless, there's vague talk of a space station sometime in the future, but congress continues to cut NASA's budget. Meanwhile, with the fall of the Soviet Union, the Russian space program is strapped for cash; trying to maintain their image of excellence in space, they cling to their one big success: the Mir space station. In an effort to bolster U.S. - Russian relations, a political decision is made to fly U.S. astronauts aboard Mir. Ostensibly, the reasoning is that we will learn about long duration space flight prior to building our own space station. Meanwhile, we will pay for the opportunity for our astronauts to make the flight, thus helping Russia financially. It was later in the process, as more cuts were made in NASA's budget, that the idea of an International Space Station was also incorporated into the deal. If we were to build a space station along with Russia, the Shuttle-Mir missions will, presumably, help with the logistics of such an undertaking.

The agreement was simple: we pay \$400 million for the opportunity of having seven astronauts live on Mir for approximately four months each. The

first astronauts and support personnel were sent to Russia for training in 1994. All of the astronauts were required to learn to speak Russian, as well as learn some of the basic principles of Mir operations. They also underwent physical training with their future cosmonaut crew mates.

However, what we see, as the story unfolds, is that the differences between the two cultures will create difficulties every step of the way. The Russians were confident of their superiority, and didn't fully trust the Americans. Meanwhile, the attitude of the people at NASA about the program was unenthusiastic. They felt that Washington was going too far in dictating space program missions, and very few people wanted to be a part of it. And, despite lessons, presumably, learned from the Challenger explosion, there was still an environment in which dissenting voices and concerns were stifled if they conflicted with larger goals. It was a disaster waiting to happen.

My one complaint with the book is that it was not presented in chronological order. For dramatic purposes, the story begins with the fourth Shuttle-Mir



(Continued on page 19)

SciDome XD

Extreme-resolution fulldome education is here. The new SciDome XD delivers over 2500 x 2500 pixels, and a stunning 8,000+ lumens for unbelievably bright, crisp starfields and graphics. Like all Spitz systems, XD offers the most comprehensive educational resources available, and the ease of use educators expect from SciDome - including the AutoWarp self alignment system.



Want a closer look at SciDome XD? Join us Wednesday May 4th for an open house at our Chadds Ford PA facility
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SEPA 2011

Jon Bell
Hallstrom Planetarium
Indian River, FL

Results from the Constellation Shootout At Young Harris, Georgia

Here are the results of the 2011 SEPA Constellation Shootout at Young Harris College's Rollins Planetarium, home of the very first Goto Chronos projector installation!

The following SEPA professionals competed, in this order, as determined by lottery: Dave Dundee, James Albury, Travis Wright, Betty Wasiluk, Adam Thanz, Jason Talley, Pat McQuillan, Woodrow Grizzle, Derek Demeter, Becky Lowder and Ken Brandt. My great thanks to all of these folks for putting their star-pointing skills to the test!

First place went to James Albury; Second place to Derek Demeter; Third place to Adam Thanz.

My thanks to Steve Gorman and his volunteer staff for making the theater available and running the console; to Jonn Serrie for providing live, heavenly background music during the competition, and to April Whitt and Dave Hostetter, who along with me, judged the contest.

I especially want to thank our prize donors: AVI; Seiller Instruments; Goto; Ash Enterprises; Robeson Planetarium; Digitalis; Jeff Bowen Technovation; East Coast Control Systems; Jonn Serrie/FutureMusic; Global Immersion; Space Telescope Science Institute; Geographics Imaging; Fernbank Science Center; Sudekum Planetarium; Lafayette Science Museum.

We had some great pointing out done during the

competition. There were lots of basic things, like Orion and the Big Dipper, the Pleiades and the Milky Way, for instance. But there were some really esoteric objects too: in addition to the ever-popular Zubenelgenubi and Zubeneshamali, there were the Cat's Eyes of Scorpius; the Kids of Auriga; Cetus, Cepheus and Algol of the Andromeda story; and asterisms like Job's Coffin (Delphinus), and the lemon wedge and teaspoon (Corona Australis and Sagittarius.)

If you're interested in competing in future Constellation Shootouts, the Rules for the 2011 event are found below.



THE GREAT CONSTELLATION SHOOTOUT

Prizes Awarded!

CONSTELLATION SHOOTOUT PROCEDURE AND RULES By Jon U. Bell, 2011

1. The Constellation Shootout is open to all conference delegates. Please sign up at the conference registration table before the competition. Judges and conference hosts and their staffs are not allowed to compete for prizes.

2. Once the stars are projected onto the dome and the house lights have been brought down, the contestants are given up to five minutes to familiarize themselves with the star-field. Each contestant must have a pointer.

3. A very slow diurnal motion is used during the competition - stars will rise in the east and set in the west as the contest progresses. The planetarium latitude setting is usually, but not always, the host institutions' latitude.

4. Chosen by lottery, the first contestant looks at the star-field, announces to everyone what he's about to point out, then points out that object. He must do this within 7 seconds of being called upon.

5. The next person now does the same thing, but

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Shootout (Continued from page 12)

cannot point out the things that have already been identified. If he forgets, judges will remind him that the object's already been pointed out and he must point out something else. He has five seconds to begin his identification; otherwise he forfeits and is eliminated from the contest.

6. Competition continues in this way until all the easy stuff has been pointed out, and people begin to

drop out as they run out of things that they know. Play continues until only one person remains.

7. The judges have the final word on whether the contestant has successfully pointed out what he said he was pointing out. On occasion when the judges are at an impasse, the audience is consulted. The decision to consult the audience lies with the Shootout's moderator.

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Catapult building competition

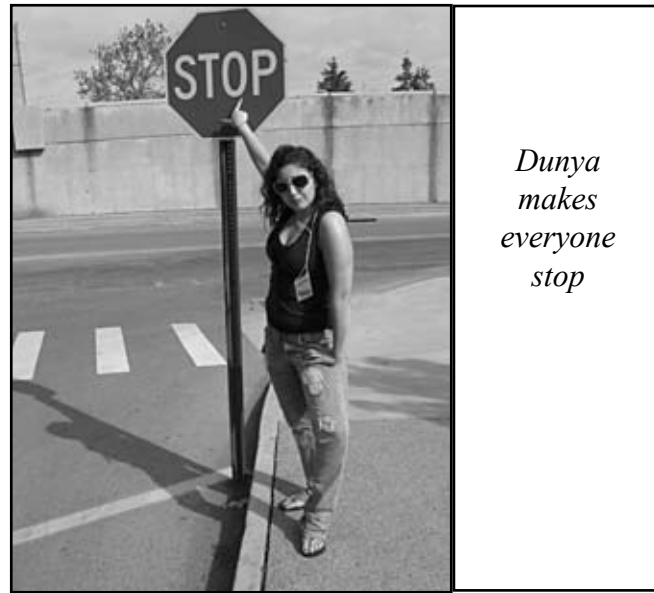


Building competition with index cards



April, Maura and Owen

pulsar search over the last three years. Next year will be a team building year for us, as April is leaving to study physics at WVU. Josh is moving with his family to Wisconsin and will join a team there currently involved in the program. Douaa Sabata,



Dunya makes everyone stop

who is a foreign student, will be taking civil engineering in Montreal. Next year, a team is forming at another high school in Berkeley County, south of us, Musselman High School. International Planetarium Society (IPS) secretary, LeeAnn Henning, of Thomas Jefferson High School, I believe in Arlington, VA will also be starting a pulsar search team. Dottie Edwards, fellow member of the Shenandoah Astronomical Society will start a team in a high school in Clark County Virginia. So it is good to see the program grow.



Dr. Rachel Rosen

(Continued on page 15)

The only sad thing is to have the post doc who helped organize the program, Dr. Rachel Rosen, leave the program to marry and manage a hedge fund. Her loss is tremendous and it is taking many people involved in the program to take her place.

The end of the year was pretty busy. I had so much to do that I actually had to turn people away from the planetarium and cancel programs, including one public program I was going to do on the early morning conjunction of planets. When school finally ended, I was pretty burnt out and exhausted. Luckily, the girls basketball team were selling movie tickets for \$4.00 as a fund raiser. I went to go see "X-Men First Class" and "Thor." Couldn't remember the last time I went to go see a movie in a theater. Although I enjoyed seeing both, I really enjoyed "Thor" and wanted to learn more about Norse Mythology and picked up a wonderful book, called Norse Gods and Giants by Ingri and Edgar Darin D'Aulaire. The book is circa 1967 and has charming illustrations in it. In the back of the book, there is a "Reader's Companion" which summarizes information told in the stories of the book. Upon reading it, I noticed some sky myths that I would like to share. For example, the Norse said that the Milky Way was Freya's necklace, Freya being the Norse God of beauty and love. The stars known as the Belt of Orion were said by the Norse to be Frigg's distaff. Frigg was the highest in rank of the goddesses of matrimony and looked after homes and was thought of as always spinning yarn. Yggdrasil is the world tree which represented the universe in Norse Mythology. Barre is the sacred barley patch where Frey and Gred met in a Norse explanation of the mystery of springs's flowering out of winter's frozen earth. Gerd, the daughter of the Frost Giant (called a jotun) Gymir, became the wife of Frey in a Norse explanation of the mystery of spring's flowering out of winter's icy earth. Gerd represents the frozen seed, brought to life by Frey's gentle rains and warm sunshine.

Many thanks to Steve and Debbie Morgan of Rollins Planetarium at Young Harris, GA for hosting us for Mountaintop Experiences.. They are a good example of the viability of a small planetarium in that their staff is small.

The Brasstown Valley Resort was beautiful and a

spectacular place to get away and enjoy SEPA's wit and wisdom. Heck, there was even a live woodchuck to greet us! (Sorry, Kris! Kris McCall, a true fan of the woodchuck, was unable to be with us due to the death of her father-in-law. I hope someone got a picture of the woodchuck and prints it here in *Southern Skies*.)

The other things I hope is to see many of the papers given at the conference printed here. Having missed last year's conference at Bays Mountain, I missed not having a CD of material of what I missed, but I know how difficult and time consuming putting one together is. I hope presentors use the existing journal to document their paper for people who could not make it.



Hanging around the ranch

I really enjoyed the fact that there was no concurrent sessions, no competition for getting to see papers. I also liked having the dorm rooms as an inexpensive alternative to the resort, but thanks to April Whitt and husband John for letting me stay overnight at their home and driving out together with April to save on renting an automobile, I got to stay at the fabulous Brasstown Resort. Also, the pre and post conference swim session in the Whitt's lovely pool, made me feel cool and relaxed. Many thanks. Since we shared a room, it cut down on expenses and we enjoyed the beautiful hand painted four poster bed in our room.

Too many great papers and sessions to go into

(Continued on page 17)

no registration fee for SEPA 2012! Get yourself there, book a room at the Belle of Baton Rouge, and the rest of the SEPA meeting is at no charge.

If you've never attended an IPS conference, here's your chance. It's right in SEPA's backyard (back porch?) and promises to be a wealth of information, ideas, contacts and friends old and new. If you can, stay for IPS after SEPA.

This is an important meeting, as 2012 is an election year. Dave Dundee and his committee are assembling a slate of candidates. We need a quorum of SEPA members for the business meeting (it's scheduled for Thursday the 26th in the afternoon).

And there are professional development funds available. These are not hand-outs or charity. These funds are the generous donations from members and vendors, and the receipts from several years of silent auctions. The application process is completely confidential, and it's easy. (If I weren't already blessed with support from my institution, I'd apply myself...) Keep any eye out for announcements and information on the SEPA web site.

As new schedules begin, new programs open, new information pops up - keep in touch with your journal editor. Send an article and/or pictures. Contact your state representative with the latest news from your dome. And keep looking up!



Dollars and Sense

Patsy Wilson
Margaret C. Woodson Planetarium
Salisbury, NC

Greetings from your SEPA Secretary/Treasurer!

\$ One of the great mysteries of SEPA is "When does my membership expire?" The solution to that riddle is easy - just look on your *Southern Skies* mailing label. If your label says, "Last Issue," then, guess what, your membership has expired!

\$ How much are SEPA dues? It depends on where you live and what you do. If you live in the SEPA region and are engaged in administrative, professional, educational or technical activities in a planetarium, then your dues are \$25/year or \$40 for two years. If you live outside the region, you pay \$15/year with no two-year option. If you support SEPA conference as a business, a benefactor, or an institution in the amount of \$100 or more, you qualify as a Supporting Member and do not need to pay additional dues. SEPA council is in the process of specifically defining this membership category, so vendors...stay tuned.

\$ Thanks to everyone who supported the Silent Auction with donations and/or bids. The total collected was \$357.00 with \$25.00 still outstanding. This brings our balance in the Professional Development Fund to \$8,224.19.

detail. But I did enjoy David Bradstreet's explanations about binary stars and bringing his software, Binary Maker to full dome. A great lesson interpreting light curves of eclipsing binaries and how to interpret them. Martin Radcliff showing me how the real data on the dome works with Sky Skan in the venter area. Listening to Mr. Freeman Owl tell sky legends under the Rollins Planetarium sky. Newcomer, Sheree Westerhaus's take home ping pong moons to teach phases. Going to to Tellus and watching the movie, "Blast!" which I have always wanted to see. Listening to Cornbread Ted and the Butterbeans and wearing our "Western Garb." Pausing to catch the snake! Workshops on quality observational equipment with Adam Thanz and Robin Byne's building a "ballooniverse." Just enjoying one another's company while walking up to Anna Ruby Falls. What I did carry back with me was the many tips I picked up from Ken Miller about how he taught Bill Gates as a teenager and that we are all only a phone call away. If I get overwhelmed or have a bad year, as I did this year, I know all of you are only a phone call or email away. But try using the phone, just hearing a SEPA member's voice and jokes might be all you need to get through the year, month, week, day or program. It is just too long between conferences, not to take advantage of the great free knowledge base that is SEPA. We are all out here waiting to help with all our areas of expertise. Maybe you can call with a funny story to share here in "Small Talk."



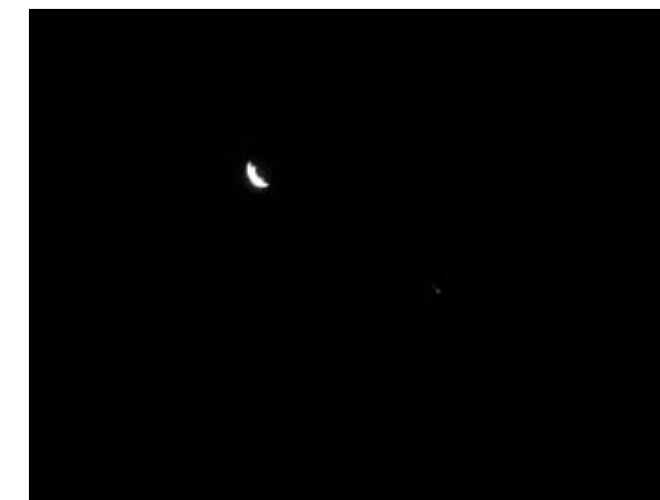
SEPAites at Anna Ruby Falls

CRAFT IDEA: Take the name tag you received from the conference. Take it off the lanyard and take the lanyard and use it to put your work name tag on it. Put your name tag into your Christmas ornament box. Hang it on your tree with an ornament hook or pretty string or ribbon when Christmas comes and savor the memories you gathered at SEPA and think of all of us.

POSTSCRIPT: You know the SEPA conference is over and you have to come down from having a mountaintop experience by trying to pull down your storm window that you closed before leaving for Young Harris and lobbing off a chunk of your thumb. Ouch! The post midnight trip to the emergency room of City Hospital/West Virginia University Hospitals East, did however, allow me to see the moon and Jupiter together in the pre-dawn sky. Sometimes a bad thing can have a good end.



My boo-boo



The Moon and Jupiter

SEPA 2011 Business Meeting

Friday, June 24, 2011

Brasstown Valley Resort, Young-Harris, GA
Patsy Wilson, Secretary

President Jon Elvert called the meeting to order at 11:25 am. Secretary/Treasurer Patsy Wilson established that a quorum was present. Whitt introduced the SEPA Council, and recognized *Southern Skies* Editor James Sullivan, Webmaster Drew Gilmore, and Parliamentarian Dave Hostetter.

Minutes of the 2010 business meeting were distributed and approved. (Groce/Talley).

The treasurer's report for the fiscal year ending on December 31, 2010 was distributed and approved. (Fleenor/Dundee). Wilson reported the current balances in all accounts as follows: Savings, \$24,701.74; Checking, \$22,360.34 and Scholarship, \$7,867.19.

Website: Drew Gilmore, Webmaster, announced that more journals have been archived. He asked conference presenters to send papers for inclusion on the website.

Southern Skies: James Sullivan, journal editor, reported that all states are reporting news for the journal. He thanked Betty Wasiluk, Robin Byrne and Woodrow Grizzle, associate editors, for their articles. Sullivan reminded the membership to check their mailing label for membership expiration date. If a label says, "Expired," no further journals will be received until membership is renewed.

Fleenor asked if consideration is being given to converting to electronic journals. Sullivan indicated that it could be done without too much trouble. Groce asked if SEPA wanted to continue to spend \$4,000/year to print paper copies. Sullivan stated that costs could be saved by eliminating color, by choosing which articles to print, and by changing from the saddle stitch style of collating. Other discussion followed relating to effect on advertising and the ability to use links and color photos if a change to electronic is made. Dave Hostetter suggested a committee be appointed to investigate the idea. A straw vote was taken to poll members on their preference. The result was 6 for paper only; 3 for electronic only and the majority for both. It was decided that council would discuss the options and report to the membership in *Southern Skies*.

IPS: Hare stated his role as IPS representative is to serve as a conduit for voicing SEPA members' preferences and concerns to the international community. He is also IPS Historian and is serving on a new subcommittee of that office called, "Deceased Member Committee." Each IPS meeting will have a plenary session to share information about members who've died during the past two-year period. Hare asked to be contacted if members learn the death of any planetarians. He will be attending an off-year council meeting in Russia next week. In preparation for that, he asked for a straw vote on the proposed sites for 2014 IPS. The results were: Beijing - 12; Rio de Janeiro - 7; Vancouver - 9.

SEPA 2012: Jon Elvert announced that arrangements have been made to hold SEPA 2012 at the Belle of Baton Rouge Hotel beginning Saturday, July 21st and running to Sunday evening when IPS starts. No registration fees will be charged for that part of the week, but a quorum of hotel rooms (35) must be booked to offset the cost of using meeting rooms. Attendance is crucial since 2012 is an election year. The voting will occur at the business meeting on Thursday afternoon. All IPS attendees will receive two planetarium shows produced through a NASA grant.

New Business: Conference Bids for 2013

Tellus in Cartersville, GA
- Dave Dundee

(Continued on page 19)

Business Meeting (Continued from page 18)

Museum of Science and History in Jacksonville, FL
- Brett Jacobs

Both facilities presented attractive bids to host SEPA Conference in 2012. The result of a membership poll indicated that Jacksonville is the preferred site.

Old Business: Professional Development Grant

Whitt emphasized that members need to apply since ample funds are available. The amount given depends on the number of persons applying, but it can cover more than registration fee. Members were asked to contact people who might be good candidates especially part-time or new staff who might not be supported by a facility. Dave Maness announced that the silent auction is still open and bids will close just before the banquet.

Conference host, Steve Morgan, made several announcement regarding lunch, the afternoon free time and the banquet.

Whitt adjourned the meeting at 12:40 pm (Hostetter/Wilson)

Bookends (Continued from page 10)

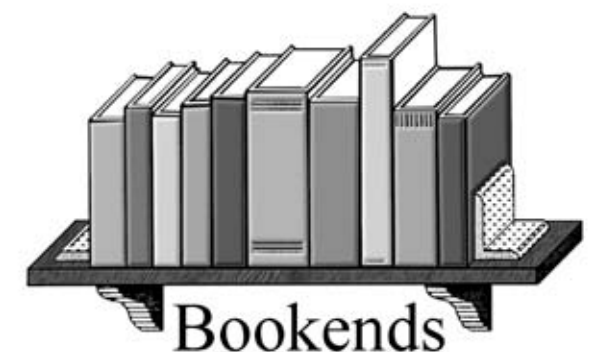
mission with Jerry Linenger aboard Mir. It was during this flight that the crew had to contend with a fire on board, in addition to a near miss with a Progress supply ship. It is only after the telling of this harrowing tale, that Burrough goes back to 1992 and discusses the development of the program and the early stages leading up to the actual flights. After the backstory, the tale is told of Mike Foale's flight, including the collision with a Progress supply ship and decompression of one Mir module.

The saga of the Shuttle-Mir missions is a cautionary tale on so many levels. On the American side: so much emphasis was placed on the

political goals, that no one paid attention to the practical situation. We went in, blindly believing that the Russian program was organized the same as NASA, that we could send our people over there, and they would be just fine. So few people were involved, that the majority of people at NASA had no idea what was going on. Those who were involved were inexperienced, and ill-equipped to deal with the Russians, let alone the very serious problems that arose. Meanwhile, the cavalier Russian attitude toward astronaut and cosmonaut safety was that they are expendable. The spaceship was more important, and should they die trying to save it, well ... they died heroes. The cosmonauts were also willing to take risks, since they would get paid extra for each daring feat they accomplished. Add into the mix the financial incentive to keep the Americans happy, so that serious situations were being covered up or downplayed.

"Dragonfly" turned out to be not only an interesting history of some of the most serious accidents in space, but also an intriguing look at how much more dangerous space can be when politics and money become the prime goals. A lesson that has not yet been truly learned.

"Dragonfly: NASA and the Crisis Aboard Mir" by Bryan Burrough, Harper Collins Publishers, 1998



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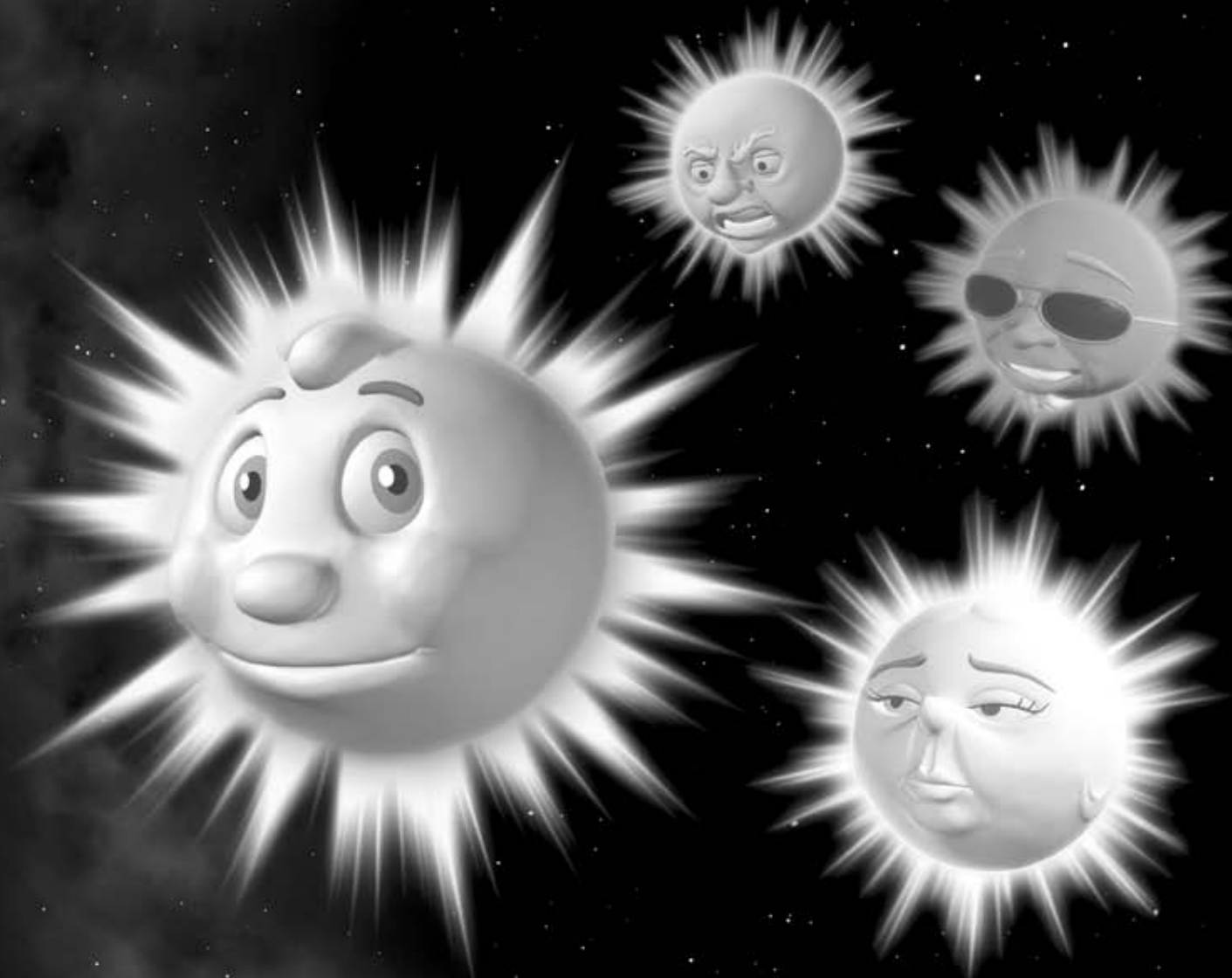
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News From SEPA Region

FLORIDA

contact: George Fleenor
GeoGraphics Imaging and
Consulting, Bradenton, FL
Jetson1959@aol.com



Florida Planetarium Association (FLORPLAN)

Contact George Fleenor for details.

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 *Galaxies*, *In My Backyard*, *Footsteps*, *Explorers of Mauna Kea* and *Skywatchers of Ancient Mexico*.

We continue to rotate shows on Wednesdays, and these shows include *The People*, *Dawn of Astronomy*, *Astrology: Fact or Fiction*, *2061: Secrets of Mars*, *To Worlds Unknown*, and *A Dozen Universes*.

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.

The Bryan-Gooding Planetarium / Alexander Brest Planetarium Jacksonville Museum of Science and History Jacksonville, FL

Thomas Webber reports: Here at the Bryan-Gooding Planetarium there is only one thing on our minds: SEPA! SEPA, SEPA, SEPA.

First, a sincere "Thank you" to the wonderful people at Young Harris College for making the 2011 SEPA conference such a success. Brett Jacobs, who represented us, had only positive things to say and came back with many new and wonderful ideas (as well as a bagful of goodies!). I am always impressed at how those of us in the planetarium field come together in cooperation to help each other and share suggestions.

And now we here in Jacksonville are looking ahead to 2013 when it will be our honor to have friends and colleagues come to the Museum of Science & History as we host the SEPA Conference. Visit Jacksonville has promised to donate both finances and resources to the event, and plans are already being doodled on Post-It Notes and napkins. Of course, this is all tentative on whether or not the world ends in December 2012. Look for air fares to Jacksonville to plummet should that happen.

To more current events:

This summer the museum is presenting the traveling exhibit "Savage Ancient Seas," which looks at the underwater reptiles that ruled the seas of inland North America 85 million years ago. In the planetarium, we are proud to be offering the complementing show "Sea Monsters." This is a fantastic production by National Geographic and made for the planetarium dome by Evans & Sutherland. It further demonstrates that the new Bryan-Gooding Planetarium now has a larger range of educational opportunities than just astronomy and space science.

Of course, we are staying true to the intent of a planetarium and running astronomy programs as well, including a daily 30-minute live look at the

(Continued on page 23)

News from SEPA Region (Continued from page 22)
current night sky.

Special mention must be made to our amazing educator Heather Smith, who was one of the winners of the NASA Tweetup contest and actually has the chance to participate in the final launch of Atlantis. Of course, at this reading the historic mission will be over, but at this writing we are very excited for Heather and know she will represent the museum well.

Our other educator, Lena, continues to keep us on our toes with her dedication and investigation. As she organizes the weekly star shows, she prepares in detail not just the astronomy but the many mythologies, interpretations and histories involved. She is an outstanding researcher/presenter and we are very proud to have her on staff.

Like many of you, we are planning special activities for the final mission of Atlantis. The planetarium will be showing the launch live and free (with museum admission) utilizing our new equipment. We will also be running slides of the shuttle fleet and will be presenting two documentaries in the museum: One on Christa McAuliffe and the other on the history of the Space Shuttle narrated by William Shatner. It is our genuine hope to do proper justice to this end of an era.

In other news, working with our media team the planetarium recently partnered with the local NBC/ABC affiliate. I will be doing two "Ask the Sky Guy" segments a week as well as writing a blog. First Coast News, in turn, will broadcast from the museum and will put a weather meter on the rooftop to give downtown specific forecasts. As the partnership evolves, we will investigate bringing in an interactive weather station to the museum and premiering the weather program *Dynamic Earth* in the planetarium.

Finally, I am pleased to report that at the end of June, we had a record attendance of over 58,500 since opening in November. Feedback and comments from the public continue to remain positive, and that motivates us to strive to do even better.

Remember: Jacksonville is the place to be in 2-0-1-3!

NORTH CAROLINA



contact: Patsy Wilson
Woodson Planetarium, Salisbury, NC
wilsonpk@rss.k12.nc.us

Margaret C. Woodson Planetarium Horizons Unlimited, Rowan-Salisbury Schools Salisbury, NC

Patsy Wilson reports: Horizons Unlimited received a federal Math & Science Partnership grant of nearly one million dollars over a three-year period. The purpose of the grant is to train and support K-8 teachers in physical science content. The first two-week summer institute was held for 54 teachers in late June. Staff of Horizons Unlimited will continue to work with these teachers to implement inquiry-based lesson plans during the coming school year.

July brings the onset of summer camps for children. There are a variety of offerings from Science Rocks for 1st-2nd; Astronomy's Awesome for 3rd-4th; Mysteries of Science for 5th-6th and SEE (Summer Engineering Experience) for middle-school girls. We also support area day camps with a planetarium experience called *Summer Planetarium Fun*. This show incorporates a short astronomy show, a live sky and a laser show in one package.

In August, twenty 4th-8th graders will travel with staff from Horizons Unlimited to the US Space & Rocket Center in Huntsville, Alabama for a week of Space Camp and Aviation Challenge. This is the fifth year that the Woodson Planetarium has sponsored this opportunity.

Our Saturday public shows begin again in August and run through the school year. The first show this year highlights the mighty planet, Jupiter, in honor of the launch of Juno. The show is called, *By Jove, It's Jupiter!*

(Continued on page 24)

SOUTH CAROLINA

contact: Gary Senn
DuPont Planetarium, Aiken, SC
SennG@sc.edu



DuPont Planetarium Ruth Patrick Science Ed. Ctr., USC Aiken, SC

Gary Senn reports: The DuPont Planetarium at the Ruth Patrick Science Education Center (RPSEC) on the campus of the University of South Carolina Aiken (USCA) is looking forward to hosting the annual Carolina Association of Planetarium Educators (CAPE) on August 22-23, 2011. The staff is busy preparing a wonderful time for all CAPERs and anyone else who might be interested.

We had a very successful National Astronomy Day on May 7 when we hosted what we call, "Earth & Sky Night." Since National Astronomy Day is usually close to Earth Day, we combined the two into one celebration, although the astronomy side is certainly the highlight and the driving force behind the event. A variety of hands-on activities were available from 7:00 - 9:30 to help people understand the wonders of earth and space science. The Astronomy Club of Augusta was on hand to provide glimpses of the heavens through a variety of telescopes. They developed a nice activity where visitors could view a variety of celestial objects from each of the telescopes. If they completed the full list of objects, they won a prize of their choice of Mars Bar, Milky Way or Moon Pie.

In May, we began our summer hours in the planetarium by opening an hour later at 8:00 and 9:00 p.m. to accommodate the use of the observatory after sunset. We showed *More than Meets the Eye* by Lochness Productions and the local production, *Digistar Virtual Journey*. In June, the planetarium presented *In My Backyard* from the Calgary Science Centre and *Digistar "Laser" Fantasy*, which is a local production. In July, we showed *Larry Cat in Space* by Lochness Productions and the local production, *"To the Moon and Beyond."* In August,

we will present *Digistar "Laser" Fantasy* again and also present our enhanced version of *Follow the Drinking Gourd* based on the program by the New Jersey State Museum Planetarium and the Raritan Valley Community College Planetarium. We provide some additional information to make people aware of some of the concerns that have been raised regarding the history of the show.

Sliced Tomatoes Productions Greenville, SC

The Editor reports: Chris Hill from Sliced Tomotes Productions says "I wanted to thank everyone at SEPA 2011 for making me feel so welcome at the conference! I grew up 10 miles from the Hutchinson, KS Cosmosphere thinking that every kid had a Cosmosphere in their "back yard"! I thank the Cosmosphere and my elementary science teacher - Mr. Unruh - for instilling my love of Astronomy. I never guessed that my career would bring me to the SEPA 2011 conference. I found everyone I met helpful and I was impressed by their commitment to education and the Planetarium community as a whole! Thank you - Chris Hill Sliced Tomato Productions."

I.P. Stanback Museum and Planetarium South Carolina State University Orangeburg, SC

Gary Senn reports: South Carolina State University is fortunate to have an excellent exhibition facility located on its campus. The I.P. Stanback Museum and Planetarium is a unique facility, the only museum with a planetarium on the campus of a Historically Black College or University and one of the few in the United States. Through its integration of the arts, humanities and sciences, the Stanback stands in the forefront of modern thinking.

The Stanback is busily preparing for new exhibits that will be available for the end of the summer and the fall. With mixed emotions, the Stanback wished a fond farewell to the Planetarium Manager, Dr. Elizabeth A. Mayo. After the academic year closed, she was married and will be moving overseas to embark on her next big adventure. We wish her well

(Continued on page 25)

TENNESSEE

contact: Kris McCall
Sudekum Planetarium
Nashville, TN
krismccall@adventuresci.com



Bays Mountain Planetarium Kingsport, TN

Adam Thanz reports: Summer is upon us and finds us perpetually working. We are currently running our own full-dome production entitled "Planetary Visions." If you attended the most excellent 2011 SEPA Conference held at Young Harris College held in Young Harris, GA (thanks Steve Morgan!), you would have experienced this interactive Solar System adventure for yourself. Written and produced by Jason Dorfman, it has been extremely popular with the public as well as a fantastic offering for our 3rd grade Solar System show. Younger children actually talk to the high-spirited tour guide robot Toggle! This would be a fantastic program for your theater as well. Just contact us for details.

We've been really happy with our summer intern, Joel Shelton. He is a student at ETSU (East Tennessee State University) majoring in physics with a minor in astronomy. He plans on getting an advanced degree in astronomy in the future. He is doing the bulk of our summer shows so we can focus on show production and many other projects. Thanks Joel!

We are now doing something we've never done on a regular basis. We have modified our show schedule so that there is an alternate show slated for 2 p.m. when there is a 2 p.m. show. Since 1971, we have provided a single show at a time, but the show would run for a few months and, other than a few exceptions, never be repeated. This new scheduling format now provides a way to have multiple shows for any day. This second show will also have a short run of two months, thus providing many different shows during a single year. These will be



Advertising poster for "Planetary Visions." It highlights not only Toggle and the Solar System adventure, but also the fantastic production quality of the show. Image from Allen Davis.

older shows we bring back and also live star-ID programs we call "Appalachian Skies." July and August will bring back our premier full-dome show, "Connections." The next two months will be a fall version of "Appalachian Skies."

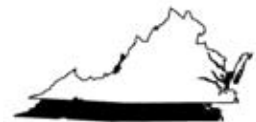
We are working to have three main programs offered each year. Most of which being complete full-dome in-house productions. So, the next program will be a full-dome version of "The Case of the Disappearing Planet." This was a classic format, in-house production that we've had available for distribution. This should open this fall and also be available for distribution. It looks at how we classify planets and see that this has happened about 150 years ago when the asteroids were discovered. The main character is a clever gumshoe entitled Skye Watcher with a voice like a 1940's movie detective. Lots of fun for all!

(Continued on page 26)

We take our show production seriously and think our shows reflect the quality of our work. Working with the technical aspects of production is part of the job. So, we are improving our data storage so we can guard against data loss with minimal cost. Media servers are great, but costly. So, we are buying ten 2TB hard drives to be paired as raid 1 sets. This allows two drives to have the exact same data each. This way, if a drive goes bad, the other drive should be good and we won't lose data. The older, eight 1TB drives we purchased with our render farm will be paired for the same purpose. This may seem like a lot of storage, but it's not. With all the steps in production, it takes about two to four TB to create one full-dome show.

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: Summer is in full swing, and with it, a slate of 5 shows in the Abbitt Planetarium. We have the classic program *WSKY: Radio Station of the Stars*, Spitz's *Oasis in Space* and *Zula Patrol: Under the Weather*, *Virginia Skies* and afternoon lasers round out the show schedule: *Laser Spirit* for July, and the brand-new *iPop* from AVI for August & September. We're interested to see how *iPop* does! As we feared, attendance is lagging due our not having a show that partners with our summer butterfly exhibit.

Fall will bring us a much-reduced schedule, as we will be reducing our programming during the very low attendance days that generally follow the summer. We are closed for maintenance work after Labor Day and through the rest of September, and reopen in October with *IBEX* as the featured program and *Kaluoka'hina* for the preschoolers. Of

course, Thanksgiving will once again bring two holiday favorites: *Star of Wonder: The Mystery of the Christmas Star* and *Laser Holidays* back to our dome. We can't wait!

Well, I'd write more, but I'm teaching a Junior Rocketeers class this week and it's launch day! Really missed seeing everyone at SEPA! Hope you all had a great time!

Thomas Jefferson HS Planetarium Richmond, VA

Leslie Bochenski reports: The school year has ended, and the Planetarium is closed for summer vacation. It was a successful year, with over 1800 students seeing a total of 138 programs. I did not make my goal of a 10% increase in attendance over last school year, and I would have accomplished this if I hadn't been forced to cancel 4 weeks of programs in February and March, my busiest time of the year.

I'm off to Colorado tomorrow for a week vacation. I'm looking forward to visiting the Fiske Planetarium in Boulder, and enjoying some clear, dark Rocky Mountain skies!

REMEMBER YOUR STATE COORDINATOR!

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