

Southern Skies

Volume 39, Number 1 Journal of the Southeastern Planetarium Association Winter 2019




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Mel Blake
Department of Physics and Earth Science
University of North Alabama
Florence, Alabama



2019 should be an exciting astronomy year. Already as I write this, we have had an excellent total lunar eclipse that was visible throughout the SEPA region. Here at UNA we had very cold weather, but also crystal clear skies, for a perfect eclipse event. See the next issue for a full report. On New Year's Day the New Horizons mission sent back amazing photos of the Kuiper Belt object Ultima Thule with its dumb-bell shape. As the year progresses we expect new results from the InSight and Curiosity rover missions on Mars, and the first private manned-missions as SpaceX and Boeing test out their spacecraft to service NASA's trips to the Space Station. Throw in the Parker Solar Probe, and data from the Hubble and other space telescopes and it will be a great year. Those lucky enough to travel to South America will be able to see a total solar eclipse in July, visible from the great city of La Serena, the host of many offices of southern-hemisphere observatories. Many of us will be celebrating the 50th anniversary of the Apollo 11 landing in July instead. On November 11 we will have a morning transit of Mercury. Overall it should be a great year for space enthusiasts.

The annual meeting this year will be in Columbia, South Carolina, and I am already looking for to it. I enjoy reading about the different kinds of activities the other planetariums in our region carry off. While many of them require an actual staff to help, I have gotten many good ideas for programs and how to do certain things better at our planetarium. The SEPA meetings also help me keep up on the new tech, and I love gadgets anyway. So the meeting should be a good one.

I look forward to your articles and reports and will continue to try to improve Southern Skies. All such things are works in progress. Feel free to share with me your ideas and suggestions for articles or if you'd like to contribute a regular column. All ideas are welcome. Remember, if you have a good fix for common planetarium problems or advice you'd like to share on different aspects of running your programs, Southern Skies is the place. I will be working on contacting other planetarium newsletters about perhaps including some of their articles in Southern Skies.

I hope everyone has a great 2019!

Submit your Articles!

Do you have a great activity to engage your audiences? Have you devised a cool gadget or do-it-yourself upgrade that you would like to share? SEPA would love to hear about it and share your knowledge.

We can receive electronic files in most any format. Graphics can be received electronically or in hard-copy, including slides or photos, and will be converted to digital with sufficient resolution.

Submission deadlines: Jan 1 (Winter), April 1 (Spring), July 1 (Summer), Oct 1 (Fall).

IPS REPORT

John Hare
ASH Enterprises
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IPS Council Rep
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Houston, TX
Space City
Proposed dates are July 3 to July 9, 2022

Saint Petersburg, Russia
ART Technology Ltd.
Proposed dates are August 7 to August 11, 2022

IPS officers beginning 2-year terms took office effective January 1, 2019.

President Elect: Kaoru Kimura
Japan Science Foundation, Japan

President: Mark SubbaRao
Chicago, IL USA

Past President: Shawn Laatsch
Bangor, ME USA

Executive Secretary: Patty Seaton
Maryland USA

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Marietta, OH USA

IPS 2020
The Tellus World of Science in Edmonton, Canada will host the 25th IPS Conference, June 18 to June 25, 2020. For conference details, sign up for the IPS 2020 e-newsletter at <IPS.twose.ca>

IPS 2022
Two sites have submitted bids for the 2022 IPS conference. The site will be chosen by a vote of IPS Council at the 2019, off-year Council meeting to be held in Iceland, June 22 and 23, 2019. Comprehensive information about both invitations is contained in the December 2018 issue of The Planetarian.

A year-long Centennial celebration of the world's first modern planetarium projector will take place in 2023. Bjorn Voss, director of the LWL-Planetarium in Munster, Germany, has gathered a committee of planetarians worldwide to help plan and implement events that will highlight the original Zeiss projector as well as others that followed.

IPS Vision 2020
Radical changes to the structure of IPS will be phased in between now and 2020. IPS Council representatives will still be part of the overall process but will report to regional representatives, who in turn will report to IPS. This will reduce the number of voting delegates from 23 to 8. By-law changes were approved by the IPS membership this past fall. The approval allows IPS to make the necessary changes to accommodate the new governing structure.

Issue 47, No 3 of the Planetarian contains detailed information about the impending changes mandated by the IPS Council. The on-line edition of the Planetarian also contains the information.

I encourage you to visit the IPS Website for more information about IPS and its many initiatives; www.ips-planetarium.org.

You can obtain IPS membership forms from IPS Treasurer Ann Bragg at ann.bragg@marietta.edu, myself at johnhare@earthlink.net, or at the IPS Website, www.ips-planetarium.org

BOOKENDS

Robin Byrne
Northeast State Community College
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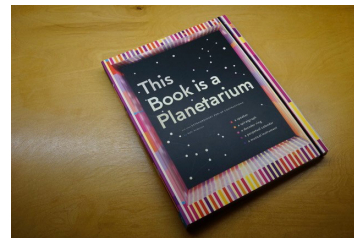
Book Review: This Book is a Planetarium

Before I review the book, there is a story I must tell. I first heard about *This Book is a Planetarium* (and other Extraordinary Pop-Up Contraptions) by Kelli Anderson late Fall 2014, when it was available for pre-order on Amazon. It seemed like it would be the perfect gift for Adam, combining both pop-ups (which we love) and planetariums, so I pre-ordered it. As the delivery date approached, I got an email from Amazon saying the delivery date was going to be delayed. No worries. I can wait. Then another email came with another delay. And another ... Long story short, the book arrived about three and a half years after I first ordered it. I have no idea what the delays were for, whether manufacturing problems, or waiting for enough pre-orders to cover the cost of printing, or something else entirely. The important part is that it did finally arrive.

Now for the book. It was worth the wait. Each page has a beautiful graphic design quality. Printed on thick card stock, the book is sturdy for holding the shape of the pop-ups. Each pop-up is very interactive, with printed instructions on what to do.

It begins with a stringed instrument and pick for plucking out a tune. With five strings, you can create a melody, and the sound quality isn't too bad, considering it's a book. Next up, a decoder ring. Having recently watched *A Christmas Story*, I couldn't help but think, "Be sure to drink your Ovaltine." Just like the Little Orphan Annie decoder ring in the movie, this one is set by a certain number, and lines up the letters to be swapped. A perpetual calendar appears on the adjacent page to the decoder ring. With years from 2012 to 2054, you can see what dates fall on each day of the week by lining up the year with the month. The planetarium is what I was most interested in. It is designed to use the flashlight on a smart phone as the light source to project the constellations of the fall

sky onto your ceiling through the holes of the pap dome. Although fuzzy, the projected image isn't ba and very bright. The speaker, also designed to wo with a cell phone, didn't work as well. Intended help amplify the sound, I only heard a slight increa in volume. The last page is a spiralgraph (not to confused with a Spirograph™). You're given a pla to insert a piece of paper with a round window, an 4 different discs shaped like cogs that run around t circumference of the opening. Each cog has a varie of holes in it to use for drawing shapes. Much like t mass-produced version, the trickiest part is keepi the cogs lined up properly around the opening so th it doesn't slip. As long as you're careful, you will ge cool final product.



Each pop-up includes easy-to-follow instructions. Most pages also have a paragraph or two to explain the principle behind the device. If thinking about the book as a gift for a child, I would say that young teenagers would be able to manipulate the pop-ups and understand the explanations. Of course, geeks, geeks like me would also enjoy it. So, whether indulging your inner child, or giving a cool gift to an actual kid, *This Book is a Planetarium* is an excellent choice.

References:

This Book is a Planetarium by Kelli Anderson, Chronicle Books LLC, 2017

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GOTO is proud to announce that Mark Webb, Theaters Director at the Adler Planetarium for 23 years, has joined Ken Miller on the GOTO U.S. team. They are committed to helping you make the future of your planetarium the best it can be.

Make a commitment to reach out to GOTO today and start a conversation about the future of your dome.



GOTO HYBRID PLANETARIUM
ORPHEUS



We may already be friends, if not let me introduce myself, I'm Mark Webb. I'm still using Chicago as my home base in my new role representing GOTO in North America. Please feel free to contact me or say hello the next time we meet at a conference. If you are visiting Chicago let me know and we can try to meet up, maybe even visit the Adler together. If you are thinking about renovating your planetarium, or building a new one, let me know about that too because I would like nothing more than to listen to your plans.



For details, please see my self introduction on Goto's website.

Mark Webb

*Sincerely,
Mark Webb*



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News From the SEPA Region Winter 2019

GEORGIA

*contact: David Dundee
Tellus Museum
Cartersville, GA*



Bentley Planetarium - Tellus Science Museum, Cartersville, GA

David Dundee reports: We had a good fall season in the planetarium. We were showing Firefall, A Trip Through Space and My Back Yard. In November we opened Mystery of the Christmas Star and Santa's Secret Star along with To Worlds Beyond. Thanks to our beautiful sky with the Minolta Sigma 1.5 we have gone from two to three live shows during our weekends and holidays. Looking forward to a great 2019.

Fernbank Science Center Atlanta, Ga.

April Whitt reports: Fernbank Science Center is being sought as a concert venue these days. In December we hosted vocal artist VA Virginia Schenck for her Winter Solstice concert, and Jonn Serrie presented his annual "Upon A Midnight Clear" concert, both to appreciative audiences.

Clouds and rain made public viewing of Comet P46 Wirtanen nearly impossible. Scott Harris was able to photograph it, dodging moonlight.

Area university students who waited until the last weekend of the semester to complete their observatory labs were plentiful, and disappointed by the weather.

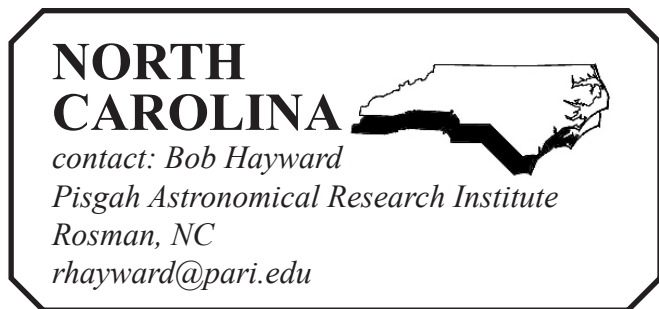
Celebrations of Apollo anniversaries filled several Saturday time slots.

Planetarium public programs for the holiday season were well-received. We've added 3 and 4 PM shows on Thursday and Friday afternoons, to attract the after-school-care crowd, but attendance has been small so far.

Fernbank Science Center hosts the county Science Olympiad in March. Preparation for that, and on-going plans for the Apollo 11 50th anniversary this summer continue.

Best wishes to everyone for a clear, dark sky and safe and happy holiday season.





American Association of Physics Teachers has selected me to serve a three-year term as the Chair the Space science and Astronomy Committee.

Ingram Planetarium

Katherine Hunt reports: Ingram Planetarium has undergone a major facelift in the last two years with two extensive equipment renovations. The first in January 2017 included a systems upgrade and the installation of a completely programmable Chromocove cove lighting system. The latter has been most beneficial in enhancing Ingram Planetarium's laser show offerings that are extremely popular in the local community and even more so with the vacationers that frequent the NC coastline and Myrtle Beach.

In February 2018, we executed phase two of their equipment upgrades with the installation of a SciDome IQ 2400 laser projector which replaced an aging SciDome HD system. This upgrade has brought both quality and efficiency to Ingram Planetarium's operations. In 2018, with the receipt of our first NISE Explore Science: Earth and Space kit and with inspiration from the IMPACTS program and The Science Stage at Morehead Planetarium we have also developed a consistent set of hands-on science programming to complement our dome theater programs. This has been super successful especially in energizing our volunteers and is very popular among families with children that visit our facility.

In September 2018 Ingram Planetarium and its team found itself in the path of the historic hurricane Florence, along with many facilities along the East Coast. While we did sustain some damage to the Paul Dennis Science Hall adjacent to the planetarium, the dome itself and all of the equipment inside made it through unscathed. We thank our fellow Carolina planetarium family and Spitz for checking in with us and offering their support.

Going into 2019 Ingram Planetarium will be renovating the Paul Dennis Science Hall and has also joyfully agreed to welcome the 2019 Carolina Association of Planetarium Educators conference in early September.

Cape Fear Museum, Wilmington, NC

Barbi Baker Reports: The Cape Fear Museum is proud to announce its designation as a Smithsonian Affiliate and begin collaboration with the world's largest museum, education and research complex. As part of this celebration, the Museum screened a Smithsonian Channel Film, *Earth From Outer Space*, on both Saturday, 12/8 and Sunday 12/9. The film showed a view from 250 miles up and documented the story of human progress over the last half-century and its effect on the earth.

Cape Fear Museum, 814 Market Street, Wilmington, NC, 28401, www.capefearmuseum.com, 910-798-4370

Robeson Inflatable Planetarium

Ken Brandt reports: Most of you know that Florence re-flooded the old planetarium and science center. My school district, of course, suffered major damage to several of its facilities, including our central office. The central office has been refitted and is occupied once again. "The needs of the many outweigh the needs of the few, or the one." And so I wait, courteously.

Meanwhile, I'm still offering programs for students and the public. We are one of 21 institutions in NC that will be a part of the statewide star party. We have also been selected to receive from NISE network a physical earth/space science kit. Good things are happening here.

The Rising Phoenix advisory board that will aid in fundraising for the rebuild is in the final stages of obtaining 501 3(c) status as a federally registered non-profit. I have rotated off SEPA's council after six years of service. It's an odd feeling, but the council in place now will be doing great things (no spoilers). Coincidentally enough, as I rotate off one, I am added to another. The



MARS

ONE THOUSAND ONE



"From the day that we were born we were destined to be together in this room today..."



Advertise in Southern Skies!

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

Rates Dimensions

\$25 Quarter page

\$50 Half page

\$100 Full page

\$125 Inside Cover

10% discount for 4 issues

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.

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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Blue Cross Blue Shield of SC Planetarium
South Carolina State Museum
Columbia, SC

Liz Klimek reports: It's been another busy holiday season, filled with holiday shows, break camps, and planning for all the exciting things coming up in the new year. Additionally, our museum successfully finished going through reaccreditation. The planetarium ended the year with its 4th wedding on New Year's Eve.

The Gibbes exhibit is nearly complete in the planetarium lobby. The old Minolta MS-10 that was in the Gibbes Planetarium here in Columbia some time ago is now on display. Next to it is the Spitz 512 that was at the Dooley Planetarium in Florence before they went digital. The only things left to install are the railing and description panels.

In January the museum will be open late for the lunar eclipse. If we get clouded out, the planetarium will try to stream a feed from elsewhere, as we've done in the past. Before the eclipse starts, we'll do a special live planetarium program on the moon, and we'll also run our Dark Side of the Moon laser show for fun. While the eclipse is on a Sunday night, we're hoping to draw a bit of a crowd due to the MLK holiday weekend.

SEPA-MAPS will be here before you know it, so be sure to check the website at: <http://www.sepadomes.org/portfolio/2019-sepa-conference-columbia-sc/> for updates. Also watch for announcements on dome-1 and Dome Dialogues. While registration hasn't opened yet, it's never too early to start thinking about presentations and workshops you might want to contribute. Planetarium conferences are an invaluable way for us to come together and share our ideas,

practices and support for one another. Please consider sharing some of the amazing things that you do, and above all, please consider coming to Columbia in June!

DuPont Planetarium
Ruth Patrick Science Education Center
University of South Carolina 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) ushered in the new year by enjoying the reports of the flyby of Ultima Thule on January 1. We were a little disappointed that this event did not generate more interest in the media. One thing that occurred near us was the publishing of a new geocache called "RPSEC - Ultima Thule." This was part of a solar system series of caches using the RPSEC observatory to represent the Sun. The 5-meter dome was used as the basis of the scale. Using the Sun diameter as 5 meters, all of the geocaches were placed at a distance from the observatory using that scale. Additionally, at each geocache, there was an image of the planet at the proper size according to that scale. Of particular interest was the Earth cache. Because the distance was to scale, when standing at the Earth cache, the observatory appeared to be the same size visually as the Sun. Of course, it was also similar in size to the Moon. Ultima Thule was too small to have a visual representation of the planet to scale. It was fun to celebrate the flyby with the release of the geocache. If you would like to learn more about this geocache visit <https://coord.info/GC81EPX>.

In December, we showed *Mystery of the Christmas Star* by Evans and Sutherland. It received a great response from our audiences.

In January, we debuted *In My Backyard*. We used the original version of this show for many years with our Digistar 2 projector. We were happy to begin using the full-dome version. We had many people who saw the original version request that we show this version, and we were happy to do so. Our only disappointment was that the segment

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about the bears running away from the lion was not included in the new show.

We are looking forward to the annual meeting of SEPA being held at the State Museum in Columbia. We hope that you will plan to attend. We are also looking forward to the 50th anniversary of the moon landing. We are calling July 20 "Moon Day" at the suggestion of former DuPont Planetarium Director, James Mullaney.

Settlemyre Planetarium
Museum of York County
Rock Hill, SC

Carole Holmberg reports: Here at the Settlemyre Planetarium we will soon be featuring free shows from the European Southern Observatory – The Sun: Our Living Star and the newly revamped version of From Earth to the Universe, which we are calling From Earth to the Universe 2.0. Our children's show will be Legends of the Night Sky: Orion from AVI. We will be offering a new monthly event for children on the autism spectrum and their caregivers this summer, called Sensory Saturdays. The entire museum will open an hour early and I will be developing a special planetarium show for them. We are also gearing up for the 50th anniversary of Apollo 11, as I am sure most of you also are.



TENNESSEE

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Bays Mountain Planetarium

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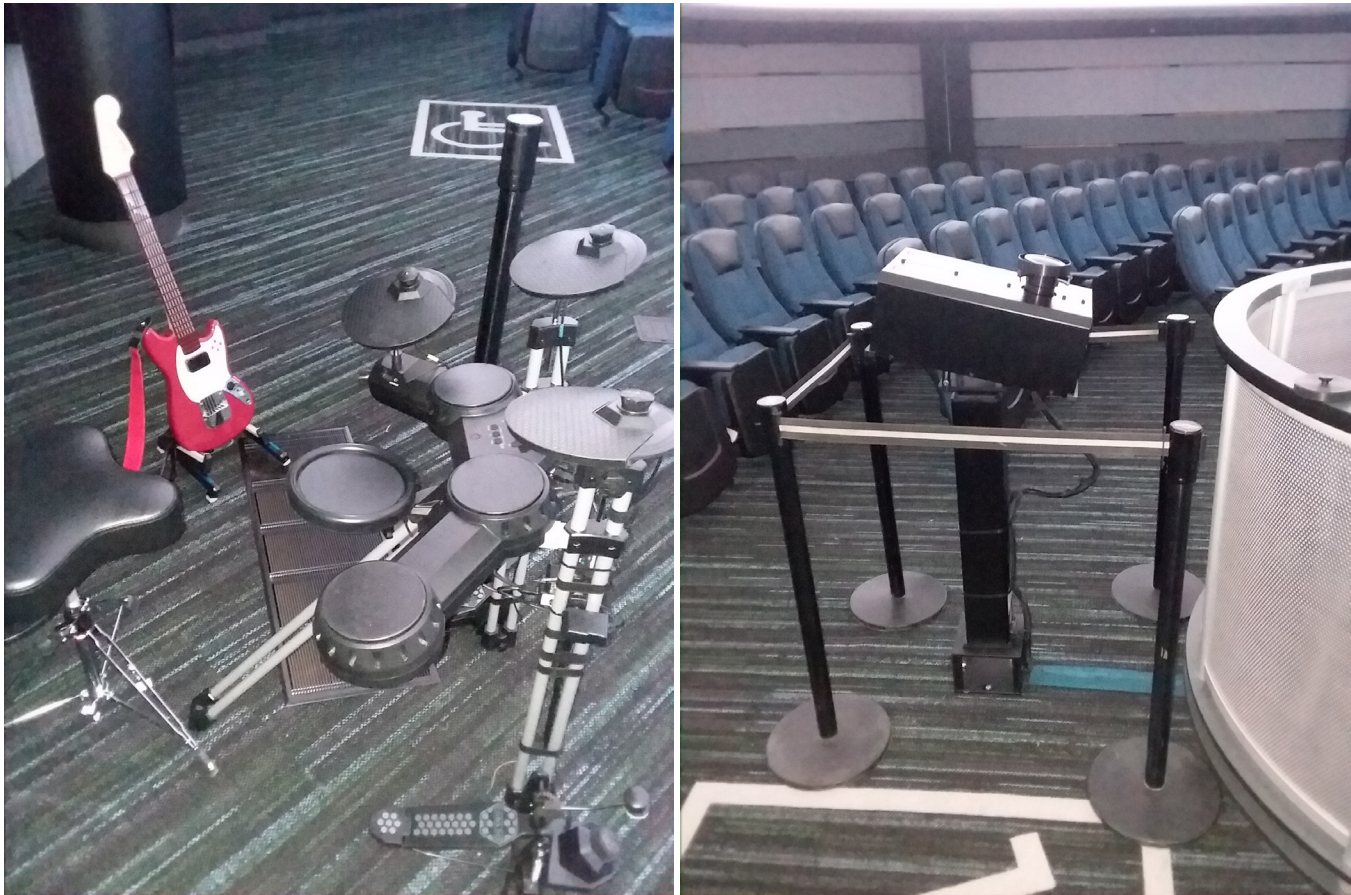
The Autozone Dome at
The Sharpe Planetarium
Memphis, Tennessee
david.maness@memphistn.gov
<http://www.memphismuseums.org/>

Dave Maness reports: Another year is nearly over. In that time I have yet to take a single day of vacation. That is about to be rectified tomorrow. I plan to head up to visit my sister in the Topeka area, along with some nephews and maybe a niece, if she can make it home from California. I will be out of the office until the first week in January. At the end of it I will still have left over vacation days to use before June.

I hope this is the last catch up I need to make on the conference; but I want to publically chastise myself for leaving out important names in my thanks for the conference help. Phillip Groce offered his constant encouragement and help from the start. Among other things, he set up the first working diagram/plan for the vendor hall. That was no small task. It had to be flexible in order to accommodate changes, because we couldn't know until the vendor reservations came in, where they wanted to be, or how many tables they would need. Even though it ended up quite different from the initial drawing, his diagram gave me the confidence I needed to believe it would work out.

Again I want to thank the team at Astro-Tec who stepped in and replaced our fire damaged dome two and a half years ago. Without them, there might not have been a conference. Of course, I was saddened to hear of the passing of their President, Clayton Hopper. My belated condolences go to Stephanie, their children and the entire Astro-Tec team. One should never be too busy to send condolences but I allowed that to happen.

In late September I was working with Audio Visual Imagineering staff Mark Zellers and Ward Davis to install the first of its kind Skylase FX system along with the new midi guitar and drum set and Bryan Adams for show and programming questions.



We began offering shows on what we call our “Fabulous Fridays” beginning on October 5. The shows were Fright Light, Metallica, and Pink Floyd’s The Wall. As I write this we are running Laser Holidays, The Beatles, and Dark Side of the Moon. We plan to change it up a bit (to simplify the promotion plan) in the new year and feature just two shows; LaseRock, and two showings of Laser Genesis for the first two weekends, followed by Laser U2 for the next two weekends and see how that does. We hope the urgency of a limited run will bring more people in. Immediately after Christmas we will begin showing Europe to the Stars, along with seasonal Stargazing, and One World, One Sky.

In the meantime we are continuing to fight the impression that the Pink Palace Museum is only for children. In the last couple of years we have added big evening events like; “The Science of Beer”, The Science of Wine”, and classic movies on the CTI Giant Screen theater and now laser shows to attract the young unmarried crowd. It seems that in many cases it takes their parents to drag them in. We get nothing but compliments about the laser shows from those “first timers”. With the effects and the beam lasers we got with the Premium Skylase system, I think they really are concert quality (except for no live band and no pyrotechnics). Attendance is gradually building.

We also added a very part time staff member, borrowed from the Education Department. His name is Luke Ramsey. He is in training and will be helping out with planetarium shows and laser shows for about 5 hours per week. My one other full time staff Bob Friedstand (some of you met him at the conference) is really shared by the entire museum for his audiovisual production skills. I can only claim him for two days each week. I will be looking for a special person who will commit to giving up his or her weekends to run lasers in the future. I hope that person exists or my work week will continue to be about 50 hours.

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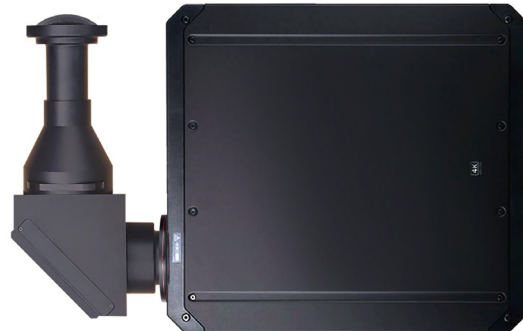


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Domes up to 60 feet



MED

XL



4K XL

Two Projector
Laser Illumination
54,000 Lumens
4096 x 4096 Pixels
Domes up to 80 feet



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Lastly, here is the Fall Season Champion Brewins. I'm just now seeing how short I am compared with most of the team. My uniform is different because I was picked up by the Brewins because I registered a day late. I can say without reservation, that with my 7 goals and 3 Assists, it was the best season of my life (!)...at least thus far!



LOUISIANA

contact: Jon Elvert
Baton Rouge, LA
jelvert1@gmail.com



Planetarium
Lafayette Science Museum
Lafayette, LA

Dave Hostetter reports: Things have been going well in Lafayette! In 2018 we will set a record for our attendance for public planetarium programs. We passed our previous best year back in September! We should finish with something over 17,000 for the year, and while this would be small potatoes for many of you, it's sure a lot better than the bad old days a decade or so ago when we were scratching for 5000. We've basically tripled our attendance since going full dome, and we're pretty happy about that!

The year 2019 will be both the 50th anniversary of Apollo 11 and the 50th anniversary of the founding of our Museum. Plans are underway for events for both anniversaries and it looks as if it will be an exciting and busy year.

Weather permitting, we plan to livestream the lunar eclipse on the evening January 20, most likely through our YouTube channel although that's not settled as I write this.

Irene W. Pennington Planetarium
Louisiana Art & Science Museum
Baton Rouge, LA

Jay Lamm reports: The Universe Gallery's new 48" OmniGlobe has been quite a hit with guests. This new, interactive exhibit not only allows our guests to engage with a variety of planets, moons, and exoplanets, but they can explore Oceanography, atmospheric sciences, details on climate change, etc. It's also open to the creation of our own content. With that, we've made special group tour presentations and decorative displays.

On October 20th we participated in "Observe the Moon Day." During this NASA-promoted, internationally-celebrated event, visitors enjoyed a variety of hands-on activities related to the moon, observed and learned about lunar samples, and viewed moon-related planetarium shows, including *Earth's Wild Ride* and *Earth, Moon & Sun*.

The following weekend, October 27th, was our best "Halloween Day at the Museum" yet, with a line of guests out the door for over an hour. Everyone had an opportunity to make and paint their own magic wands: their own personalized creation used for some "planetarium magic" during the live presentation of our Astronomical World of Harry Potter show. Everyone could also make their own origami Howler and Monster bookmark, take a selfie at our Platform 100 ¾ photo booth, try some Every Flavor Beans, and relax with some Butterbeer at our Leaky Cauldron pub. It was a day of Halloween-themed shows as well, featuring the new Star Wars: The Worlds Within original program. To go along with this theme, we had some special hands-on STEAM-fueled activities including a make-your-own Star Wars Straw Rocket, and a make-your-own Crater station. We also had a visit from the East Baton Rouge Parish Library with some giveaways. And speaking of giveaways, we offered up a free raffle for a plush Care of Magical Creatures book before the first showing of the *Astronomical World of Harry Potter* show, a show that was so popular we had to add a second presentation since the first one sold out.



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We also participated in the annual Festival of Lights held downtown in Baton Rouge. Our planetarium had a lineup of holiday shows, including a special screening of the *Polar Express* on our dome. Everyone coming to *Polar Express* was able to enjoy a cup of hot chocolate and got their very own custom train ticket, stamped with “Believe” for admission.

We’re going into the new year by continuing our Astronomical Calendar of Events into the seasonal Sky Tonight presentations. Any time there is a significant astronomical event, there will not only be a blog posting but a fulldome update after our Sky Tonight presentations as well, insuring that our content is always up-to-date.

Speaking of the Irene W. Pennington Planetarium blog, we’ve had our best year so far since it started in 2013. We’ve doubled the count of unique readers and now get visited from over 30 countries.

The upcoming 2019 year will see our theater’s scope expanding in interesting ways. For starters, we’re going to be host to our first ever live theater presentation. In mid-January we will welcome the Theatre Baton Rouge production of *Silent Sky* by Lauren Gunderson. This live performance will be coupled with our own fulldome visual work. Every scene will be fleshed out with immersive imagery that fits with the mood and ambience. We’ll transport our theater guests to the deck of an ocean liner looking out upon rolling waves and a starry sky, then out to the center of the Large Magellanic cloud, and back home to the Harvard Observatory with the sky as it was in 1905.

As far as our current planetarium content, we are running and rotating a host of shows, including: *Secrets of Gravity: In the Footsteps of Albert Einstein*, *Dinosaurs Alive!*, *Magic Tree House: Space Mission*, *Lewis & Clark: Great Journey West*, *We Are Stars*, and *Dream Big: Engineering Our World*. We’ll be welcoming in a new astronomy-based show called *Seeing* starting in January.

St. Charles Parish Library Luling, LA

Jason Talley reports: Our little planetarium was busy in 2018. As the newness of 2016’s renovations waned, our attendance lagged. However, our events and connections in the community continue to grow.

The planetarium hired a new Planetarium Assistant, Ashley Gray, back in May. Her artistic and digital graphics skills were immediately useful in our digital planetaria era. Gray quickly learned our MGII’s interface and proved herself adaptive during the live portions of our Tuesday and Thursday night, public presentations.

Throughout 2018, planetarium staff continued to integrate STEM activities into our special events and our library’s STEM events. Many of these activities were provided through the NISE Network and its 2018 Earth & Space Toolkit. Using the toolkit, the planetarium hosted its first Yuri’s Night event in recent years. Luckily, NISE Network again selected the planetarium to receive its 2019 Earth & Space Toolkit.

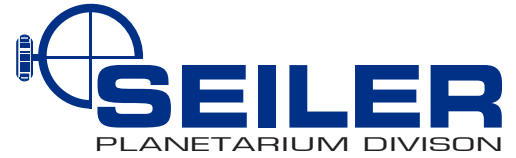
Our annual teen Lovecraft Halloween lock-in grew this past October. This year, the planetarium created an animation to Lovecraft’s short story “Dagon.” Stephen Ford, of television’s *Teen Wolf*, narrated the story for free due to his friendly association with our library staff. Miss Gray’s illustrations were animated for the dome using Adobe After Effects. Staff highlighted the accurately changing phases of the Moon in the animation, which showed the passage of time in the story.

The planetarium also partnered with a local public school teacher in the autumn months. The teacher regularly hosts prekindergarten story times and activities at our local schools. She offered to promote the planetarium to her groups and host an activity following our Saturday morning children’s presentation each month. Our staff hopes to foster many similar connections in the future.

Moving into 2019, the planetarium and library staff

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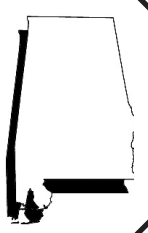


www.es.com/mars

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started planning a special summer event for the 50th anniversary of the Apollo 11 landing. The event fits perfectly with the Collaborative Summer Library Program's theme for next year, "A Universe of Stories." 2019 offers this great opportunity to partner with local libraries whether or not they use this summer reading theme. 2019 will be another exciting year for planetaria across the region.

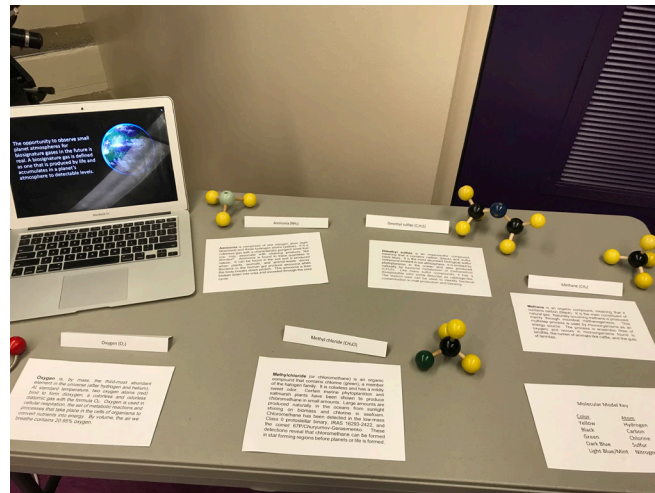
ALABAMA
contact: Mitzi Adams
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University of North Alabama Planetarium,
Florence, Alabama

Mel Blake reports: The fall was fairly busy for us at UNA planetarium. On Oct 6th we volunteered for the BEST Robotics competition. This is the 8th year we have helped with this, and it is always a fun and raucous event - schools get points for team spirit, so they cheer loudly! On October 20th we participated in our fifth annual Observe the Moon Night. This went well with about 30 people showing up to take photos of the Moon through a telescope, get a lunar map, and eat Moon Pies. On October 25th we did a new program for Chemistry week, in collaboration with our Chemistry department. The theme this year

was astrochemistry, so she contacted me about doing an event at the planetarium. I always love collaborations since it means a bigger and better event can be done than if I am doing one on my own. I did a lecture about nucleosynthesis and the creation of complex molecules in space. The Chemistry folks had models of molecules, an interactive computer about the molecules and gave away door prizes courtesy of the National Chemistry Society. It was a packed house with about 50 people showing up. I am hoping this will be an annual collaboration among our departments.



Chemistry Week display of various molecules found in space.

On October 30th we did our annual Halloween "Doomsday" lecture about all the things in the cosmos that could kill us at any moment. We decorated the planetarium for Halloween and gave away candy. I am not sure if people come for the candy or the lecture! We do a costume contest as part of the event.



The BEST Robotics competition 2018.



We always have fun decorating the planetarium for Halloween.

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In November, along with the Shoals Astronomy Club, we helped install the new telescope at Lagrange Observatory. We invited the public for the “First Light” ceremony, and recognized Walmart for the grant they gave us to obtain the telescope. We had a small group of about ten or eleven, but interestingly we had people from four different countries. Also in November we did our second “Stars Over Hogwarts” event. We discussed the astronomical and astrological references in the Harry Potter novels. I have made a set of star charts showing the sky for the winter and summer with various constellations and stars from the novels, and after the lecture I point out the constellations and stars using the planetarium, and people can follow along with their star charts. This sort of program seems to be gaining in popularity.



Little Mohamed becomes the first person to officially look through the new Lagrange telescope. Eric Geater, SAC president is shown.

In December we did our annual Christmas shows, which seem to be gaining in popularity. We had 163 people show up over three nights, which, since our capacity is 60 people, was very good. We use the Evans and Southerland show “Mystery of the Christmas Star”. We decorate the planetarium, wear Santa hats and give away candy canes. Everyone seems to enjoy the event and we are starting to get repeat visitors who have come several years in a row as a part of a family tradition. That’s always a great feeling.

Best wishes to everyone on a productive 2019!

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Passport to the Universe was developed by the American Museum of Natural History, New York (amnh.org) in collaboration with the National Aeronautics and Space Administration (NASA). Major support for new version provided by California Academy of Sciences, San Francisco.

2018 End-of-Year Financial Report – SEPA
Submitted by Patsy Wilson –January 1, 2019

All funds are held at Branch Banking and Trust Company

Balances: (as of 12/31/18)

Operating	16,332.88
Savings	25,244.13
Professional Development Fund	13,224.36
PayPal Account	<u>593.15</u>
Total	55,394.52

Operating Account (as of 1-1-18) 5,773.17

Income:

Memberships	550.00	
Journal Ads	360.00	
Transfer from PD Account	465.00	
Transfer from PayPal	11,500.00	
Transfer from Business Checking	7,000.00	
Silent Auction	791.00	
Conference	30,054.78	
Pleaidés Conference Profit	2,134.49	
Total Income		<u>52,855.27</u>
Total Credits		58,628.44

Disbursements:

Website Maintenance/Hosting	2,852.74
Postage and Supplies	18.15
PD Awards	465.00
Zoom & Dropbox Subscriptions	869.90
Service Charges	54.00
Conference Host Plaque	75.63
Transfer to PD Fund	1,026.00
Stipend-Planet Show work	1,000.00
Conference 18	35,934.14

Total Debits (42,295.56)

Balance (as 12/31/18) 16,332.88

Continued from page 21

Savings Account (as of 1-1-18)	32,235.97
Income:	
Interest earned	<u>8.16</u>
Total Credits	32,244.13
Disbursements:	
Transfer to Checking	7,000.00
Balance (as of 12/31/18)	25, 244.13

Professional Development Fund (as of 1-1-18)	12,663.36
Income:	
Proceeds from Silent Auction	<u>1,026.00</u>
Total Credits	13,689.36
Disbursements:	
PD Award for Registration	175.00
PD Award Stipend	290.00
Total Debits	(465.00)
Balance (as of 12-31-18)	13,224.36

PayPal Account (as of 1-1-18)	641.08
Income	
Memberships	1,090.00
Fee Reversal	15.66
Registration	9,175.00
Mini-LIPS	300.00
Ricoh Camera Workshop	1,400.00
Affiliate Dues	35.00
Guest Meals	125.00
Silent Auction	235.00

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Total Income:		<u>12,375.66</u>
Total Credits		13,016.74
Disbursement:		
Fees	383.59	
Transfer to Operating Account	11,500.00	
Refund	540.00	
Total Debits:		<u>(12,423.59)</u>
Balance (as of 12-31-18)		593.15

