



CONSTELLATION

The newsletter of the Middle Atlantic Planetarium Society



The BIG story...

MAPS Officer Candidates for 2025 Elections

The time has come for MAPS members to cast their votes to shape the leadership structure of our great organization. In January 2025, we will be conducting elections for the offices of President-Elect, Secretary, and our new office of Treasurer-Elect.

The winning candidates will serve terms on the MAPS Executive Committee according to our newly-revised Constitution and Bylaws. Please take time to review the candidates' statements (posted here and on our MAPS website), and keep an eye out for ballots coming to your inboxes in mid-January. Many thanks to all of the candidates for their willingness to serve!

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FUN & GAMES

“Dear Friends and Fellow Planetarians,”

President's Message by Noreen Grice

Let me begin this message with a recent experience. I went to a local holiday church fair, and decided to stay and have a sandwich. Lots of other people had the same idea, and we all sat around tables, enjoying each other's company. As it turned out, there was an empty seat opposite me, and the pastor asked if he could sit there. Of course, I replied. And over the next 45 minutes, we had an animated conversation about many topics including the planetarium. If you know me, you know that I love to talk about folks who teach under the dome and make a real difference by exciting all who attend their programs. Don't worry - I didn't mention any of you by name, but I gushed at how we work magic together to inspire people and leave them wanting to learn more. What could be better than strolling under a starry dome and pointing out the stars to wide-eyed visitors?

Yes, this is the time of year when we gather together with friends and family, and although many miles may physically separate us, we are a planetarium family in our hearts. Some of you work in museums, schools, independent or portable planetariums, or currently may not be working under a dome at all. It doesn't matter. We help each other. What we all do counts. And what this society does to move the planetarium field forward, counts a lot.

The MAPS family has many members. The words you are reading right now come from my thoughts, but the Publications Committee has incorporated them into this issue of The Constellation. Articles that help you bring new

resources to your programs may come from the Education Committee. Wondering what MAPS was doing on a particular date? The History Committee can probably tell you! Assisting us all with conference registration information and annual renewals is the Membership Committee. If someone passes away, we know the Memorial Committee will honor them with distinction. Looking for more information about MAPS online? The Website Committee can help. Keeping important track of our organizational structure is the Constitution Review Committee. Planning for the next conference is the Programs Committee. And the committee with the most recent activity is the Elections Committee. Which reminds me...

Every two years, MAPS members decide on the next elected group of MAPS Officers. Soon you will be receiving information on how to cast your ballot for the nominated positions of President-Elect, Treasurer-Elect and Secretary. We alternate election years for Board and Officer elections, and those who are selected by you volunteer their time to provide service to this organization. Officers and Board members are selected by YOU to represent YOU and all members of the Middle Atlantic Planetarium Society. As you scroll the pages of this issue, please take a few minutes to read the biographies of all candidates, and please vote when voting opens in January. Your selections will determine the future path for MAPS. Your vote is very important!

(message continues on next page)

“Dear Friends and Fellow Planetarians,”

President’s Message by Noreen Grice (continued from previous page)

Engagement is also an important theme in this organization. We want all members to stay engaged with MAPS. If you’d like to join a particular committee, please email that Committee Chair. You can read all about the MAPS Committees and contact Committee Chairs through our website www.mapsplanetarium.org. We need your help.

Our next ALL MAPS Members Zoom Meeting is scheduled for Tuesday, January 7, 2025 at 7:30 pm. We will post the link in advance. We have lots to talk about, including information on the 2025 MAPS-SEPA Conference in Virginia and our upcoming elections. There will be time for you to meet with members of your affinity groups. And, if you have a topic you’d like us to include on the MAPS Zoom agenda, please let our Secretary (Amie Gallagher) know!

As I close this message, I want to wish everyone a very happy, healthy and safe holiday season. The Sun may set earlier at this time of year, but we gather the symbols of fire and light and the company of friends and family to brighten our spirits. Be well, and I’ll see you in January 7, 2025 on Zoom!

Sincerely,

Noreen Grice,
President

Middle Atlantic
Planetarium Society



P.S. Don’t forget to renew your MAPS membership!

Connect with MAPS!



MAPS Executive Committee

OFFICERS:

President - Noreen Grice

You Can Do Astronomy
New Britain, CT

President-Elect - Tony Kilgore

Irene V. Hylton Planetarium
Woodbridge, VA

Past President - Brian Koehler

Treworgy Planetarium
Mystic, CT

Treasurer - Mike Francis

Stars Science Theater
Auburndale, MA

Secretary - Amie Gallagher

RVCC Planetarium
Branchburg, NJ

BOARD OF DIRECTORS:

Stephen Dubois

Whitworth Ferguson Planetarium
Williamsville Space Lab Planetarium
Ancient Eyes Music
Williamsville / Buffalo, NY

Paul J. Krupinski

Mr. K's Mobile Dome Planetarium
RMSC's Strassenburgh Planetarium
Cheektowaga, NY

Patty Seaton

Howard B. Owens Science Center
Lanham, MD

MAPS Standing Committees and Committee Chairs

Awards Committee

Committee Chair: Dr. Carlos Miranda

Constitution Review Committee

Committee Chair: Mark Percy

Education Committee

Committee Chair: Lee Ann Hennig

Elections Committee

Committee Chair: Kevin Williams

History Committee

Committee Chair: John Meader

Membership Committee

Committee Chair: Mike Francis

Memorial Committee

Committee Chair: Paul Krupinski

Program Committee

Committee Chair: Tony Kilgore

Publications Committee

Committee Chair: Brian Koehler

Website Committee

Committee Chair: Tim Collins



The Constellation is the newsletter of the Middle Atlantic Planetarium Society (MAPS). It is published four times a year near the equinoxes and solstices. To submit an article, email publications@mapsplanetarium.org.

Québec Immersive Films



-22.7°C
 Directors: **Molécule, Dirty Monitor**
 Duration: **37 minutes**
 Companies: **fig55, Poolpio, Zorba Production**
 Distributor: **Hubblo**

Synopsis: This film is an immersive experience in the Arctic Circle inspired by the adventure of the musician Molécule. The viewer will experience the musical creation of the artist in an extreme environment and explore the Arctic, a hostile world made of mystical sounds and vibrations.



ONCE UPON... MY STORY
 Director: **Francis Gélinas**
 Duration: **22 minutes, 30 seconds**
 Company: **Maki Media**
 Distributor: **Hubblo**

Synopsis: *Once upon a time...* children telling tales from their own imagination in their own words. Brought to life in glorious animation, these stories brimming with charm, humour, and adventure blend reality and fantasy and plunge us into the unbridled imaginings of children.



BÉBÉ SYMPHONIQUE
 Director: **Noisy Head**
 Duration: **33 minutes**
 Company: **GSI Musique**
 Distributor: **Hubblo**

Synopsis: Combining 2D, 3D and frame-by-frame animation, this multimedia show transports children from birth to 18 months and their parents into a marvelous universe of shapes, colors and textures, designed to capture their attention.



ONE SKY
 Director: **Sébastien Gauthier & al.**
 Duration: **43 minutes, 36 seconds**
 Company: **Sébastien Gauthier 360 Productions**
 Distributor: **NOIRLab**

Synopsis: Award-winning movie *One Sky* is a collection of beautiful short films about constellations, astronomical instruments and scientific knowledge from various cultures around the world. Each chapter is presented in an original and engaging way with its own artistic style featuring the work of international artists.



LANDS OF THE AMERICAS
 Director: **Patrick Bossé**
 Duration: **45 minutes**
 Company: **fig55**
 Distributor: **Hubblo**

Synopsis: Like a travel diary, *Lands of the Americas* journeys through the works of René Derouin and the lands he has explored. Experienced in an immersive dome or through virtual reality glasses, this 360° film revolves around the artist's quest for identity, which spanned his 60-year career.



UNTOUCHED
 Director: **Michel Lemieux**
 Duration: **4 minutes, 50 seconds**
 Company: **4D ART**
 Distributor: **4D ART**

Synopsis: *Untouched* is an artistic look at life during the pandemic. Bonds between people crumble as society drifts. There's a powerful urge to touch and be touched. Everything seems so out of reach. *Untouched* is an experimental film by director Michel Lemieux. It is a short and immersive film imagined by the artist while living in isolation due to the pandemic in 2020.



INTRODUCTORY ECONOMETRICS
 Director: **Lydia Yakonowsky**
 Duration: **3 minutes, 45 seconds**
 Company: **Lydia Yakonowsky**
 Distributor: **SAS DIVRSION**

Synopsis: *Introduction to Econometrics* is an animated film that explores how various aspects of economic modelling can be creatively visualized. Taking an off-kilter approach to the subject, it frees curves from the bounds of theory and allows them to roam in a living and complex data universe, where graphical grid-like surfaces evolve to create new spaces, vast walls, and ceilings like a canopy of stars.



WORLDS OF ICE
 Director: **Philippe Baylaucq**
 Duration: **34 minutes**
 Company: **NFB (National Film Board of Canada)**
 Distributor: **Hubblo**

Synopsis: *Worlds of Ice* is a 360° contemporary full-dome film that envelops the spectator within worlds of ice that oscillate between the deeply familiar, the unconventional and the transformative. 34 minutes in length, *Worlds of Ice* is an immersive unravelling that reveals the many universes of ice.

ABOUT L'EFFET QUÉBEC:

Québec-based companies, creators, and artists are global leaders within the field of digital creativity, including interactive installations; virtual, augmented and mixed reality; immersive films and exhibitions; architectural mapping; and AI entertainment. They are renowned worldwide for their creativity, innovation, storytelling, agility, and willingness to embrace risk.

L'EFFET QUÉBEC:

The Export expertise cluster endows companies in Québec and elsewhere with shared and sustainable tools to facilitate discovery and networking among the industry's various players, sectors of activity, and markets.



HUBBLO



Stories from the MAPS Region

Big Dipper Finder Activity

by Lee Ann Hennig

This article marks the second in a series of introductory star charts. We introduce our students to the northern sky and the importance of the North Star as a tool to locating directions. Again (as with the charts presented in the Fall 2024 issue of the CONSTELLATION), when introducing beginners to star charts, I like to start out with simple examples.

Start your lesson with a session on:

- 1) Horizon**
- 2) Zenith**
- 3) Meridian**
- 4) Cardinal Points**

Introduce them to the Night Sky in the North:

- Review a few bright stars, constellations, stellar properties, some myths. Remember, this could be an addition to the general night sky, as in the previous lesson.
- Underscore where they are looking to find the objects you are talking about by emphasizing the terms above.
- Ask if anyone can point out the North Star, and you will certainly get a few who will point to the brightest star in the sky. This gives you the opportunity to correct that misconception and discuss Polaris's significance.

Star Chart Activity:

- Have the students bring out their Dipper Finders (pre-assembled or assembled in the planetarium).
- Introduce the Dipper Finder, and have the students set it for the time that represents the night sky in your planetarium. Remember to remind them (as you did in the introduction, that the brightness of a star is not always an indication of size) that the size of the dot indicating the star is just meant to show its brightness relative to the other stars.
- North is indicated on their charts; have them indicate East and West on the charts. Discuss why South is not indicated.
- Choose the Big Dipper on the chart and help the students recognize it in the planetarium sky. See if they can locate Cassiopeia or the Little Dipper.
- The fastener goes through Polaris, so it might prompt some questions as to why. Take that opportunity to discuss the uniqueness of the North Star's position, and how that helps us.
- Some of the students will no doubt notice, as they rotate the finders, that those stars in the North do not go below the horizon - they stay up all night. Draw the distinction between the apparent motion of objects in the northern sky (circumpolar) and the rest of the sky (east to west).
- What does the altitude of the North Star reveal? Explore the relationship of latitude to the altitude of Polaris.

Stories from the MAPS Region

Big Dipper Finder Activity

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- What would the Northern sky look like from different latitudes?
- Write down the names of the constellations on the charts.
- Draw in extra constellations, asterisms, stars, etc.

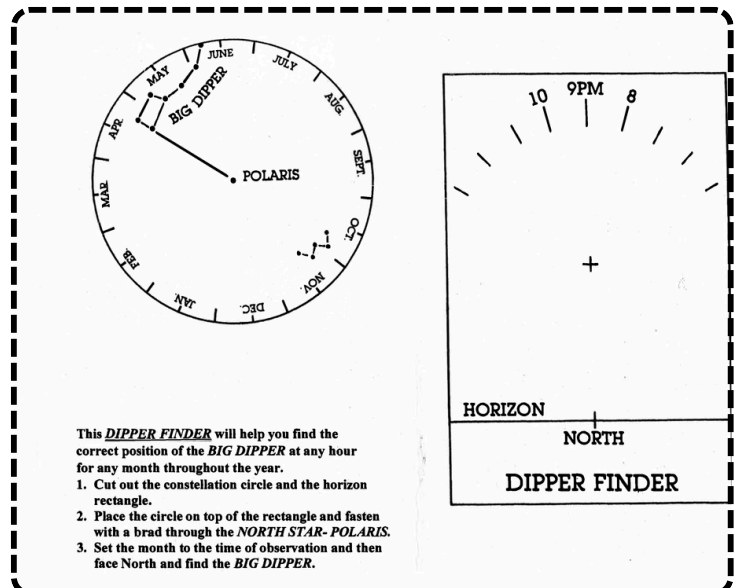
Remember:

- As usual, feel free to use the Dipper Finder as is, or to modify it to suit your needs. You can make this activity as challenging as you wish depending on your audience: add a more detailed chart, a discussion on precession, the impact on navigation through history, other planets' North Stars, and don't forget the literary references to the North Star!
- And don't forget... the questions prompted by our actions and the environment of our sessions enhance the learning of the students. Be ready to seize those moments!

Follow-up questions for discussion possibilities:

- 1) Ask the students what the northern sky would look like if they went out several hours later.**
- 2) Introduce the terms clockwise vs counterclockwise as it relates to apparent motion of the stars.**
- 3) How would the stars appear to move in the Southern hemisphere?**
- 4) Is there a South Star? Why or why not?**
- 5) Will Polaris always be the North Star? What will be the next bright North Star, and when?**
- 6) How do you know which direction is north, east, south, and west?**

Click on this image to download a PDF of the Dipper Finder



Stories from the MAPS Region

“Celebrating the 100th Anniversary at the Williamsville Space Lab Planetarium”

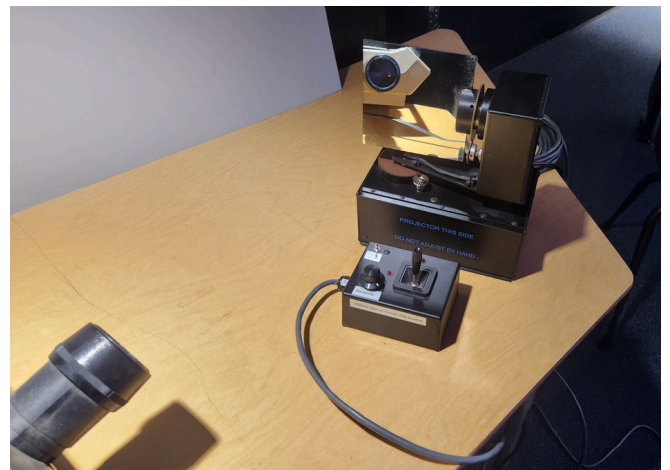
by Mark Percy

I'm at a turning point in my life as a planetarian. The total eclipse has passed and my retirement is on the horizon. Coincidentally, the planetarium world is celebrating a milestone anniversary. As I thought about a plan for this autumn's public shows, a way to reflect on both came into focus.

We offered a series of three shows in October, November and December. Steve Dubois kicked off the series by explaining numerous methods developed by humans to depict the motions of the solar system and represent the night sky. Archimedes's orrery, the Antikythera mechanism, armillary spheres and astrolabes were explained. Steve turned the clock back even farther with diagrams and photos showing how the Egyptian pyramids, Stonehenge and Mesoamerican monuments were used to measure and demystify celestial apparitions. His program laid a thorough foundation for our next programs about projection planetarium history.

The second program's theme was “SPFX” wherein I showed a myriad of methods used in the planetarium before full-dome video came along. I still had a good collection of devices that I couldn't bring myself to part with yet. I got them all out again and demonstrated as many as I could. The 35 mm slide was the foundation of our work back in those days. I explained how we fought G.R.I.S. (gray rectangle in space) with hand-painted opaquing fluid

and specialized film, and how we aligned panoramas and dissolve pairs. My remaining supply of Wess mounts became gifts for any interested visitors.



Despite going digital in 2007, most of my optomechanical devices still sat in my storeroom. Each took an epic battle for funding to acquire. I recall drooling over the Sky-Skan catalog, and how elated I was to add each to our capabilities. School district rules prevented me from selling them or even donating them to another dome so they remained on my shelves until November. I got them all out and let audience members fly an image around the dome using the mirror slew unit. An image rotator, moving clouds, and a motorized zoom lens added motion and excitement to my programs when I was a young planetarian, and they got one last demonstration that night.

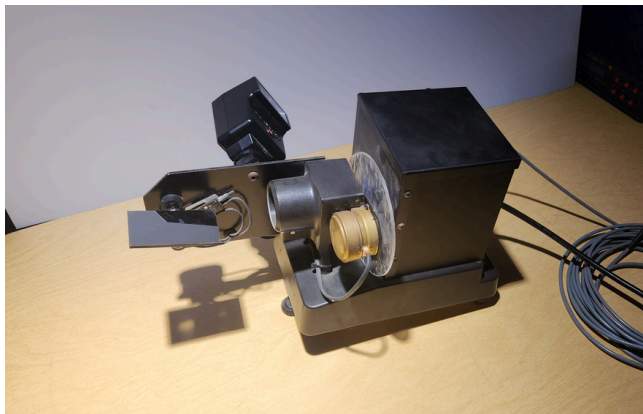
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Stories from the MAPS Region

“Celebrating the 100th Anniversary at the Williamsville Space Lab Planetarium”

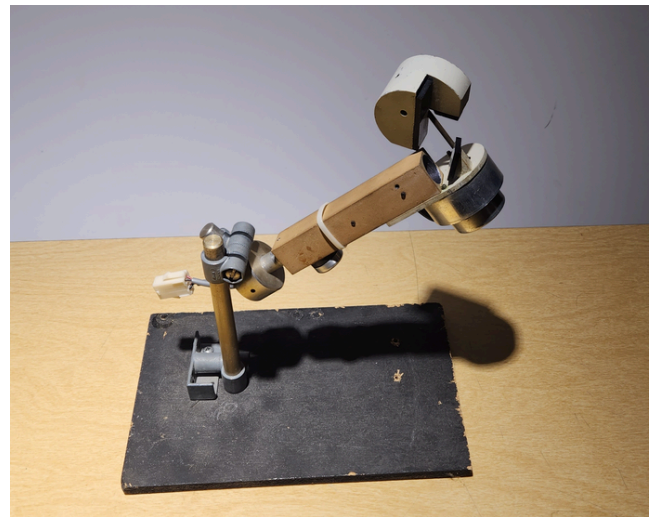
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I got into the really specialized stuff next. I had to borrow a camera strobe and epoxy a mirror back on to make the bolide meteor work again. Colleagues helped me with photos of things I didn't even have anymore, like the expanding galaxies and aurora projectors. The warp drive from Ash Enterprises took us on one last hyperspace journey, and then I went through the generations of video technologies. I explained various tape formats and how laser discs solved numerous problems. That giant CRT projector with its truly black background was the ultimate special effect for a good number of years of my career.



The third and final program was about the star projector. I gave a brief history of the early days at Zeiss, but I focused on the Spitz machines since we have an A-5. I learned so much about Armand Spitz while doing my research. Did you know that he changed the design of the A-1 to a dodecahedron because of a suggestion from Albert Einstein? Even the little satellite projector that I still have has a

deeper story. Armand coordinated a league of satellite spotters across the country to aid national defense efforts in the 1950s. I explained the evolution of the Spitz projectors, but even that was too much information for one night. There are sooo many specialized models that I never heard of before, so I just worked through the evolution of the A series for the most part.



The capstone was what I billed as “Deconstructing Jake.” (I call our A-5 Jake the Robot.) One by one, I explained how each part of the machine works and took all of the covers off. Participants got to see the inside of the starball and planet cage, and I passed around samples of star cells, planet mirrors, stepper motors, mercury cutoffs, constellation and Milky Way transparencies and the xenon arc star lamp. As anyone with an optomechanical instrument knows,

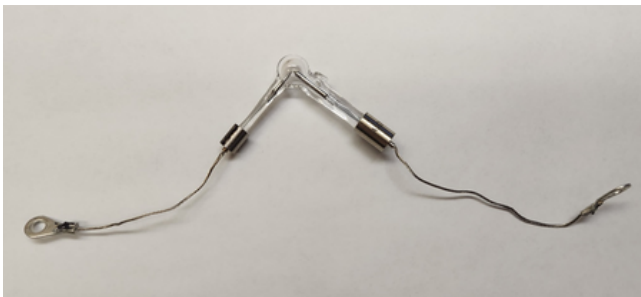
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Stories from the MAPS Region

“Celebrating the 100th Anniversary at the Williamsville Space Lab Planetarium”

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patrons are fascinated by not only what our machines can project, but how it is accomplished. That itch got a good scratching during this program.



Jake will remain a key tool in our toolbox for years to come, but my time as Director should come to an end in June of 2026. The second program was an excellent opportunity for me to clear those shelves so that my successor doesn't have to deal with all the obsolete stuff that they'll never use. The last program helped me inventory all the spare Spitz parts and organize my thoughts for training the next Director about how to care for old Jake. All of the programs were fun reminders for me of why I wanted to be a planetarian.



Stories from the MAPS Region

“Caro’s Comet: The Celestial Cinderella”

Book Review by Francine Jackson

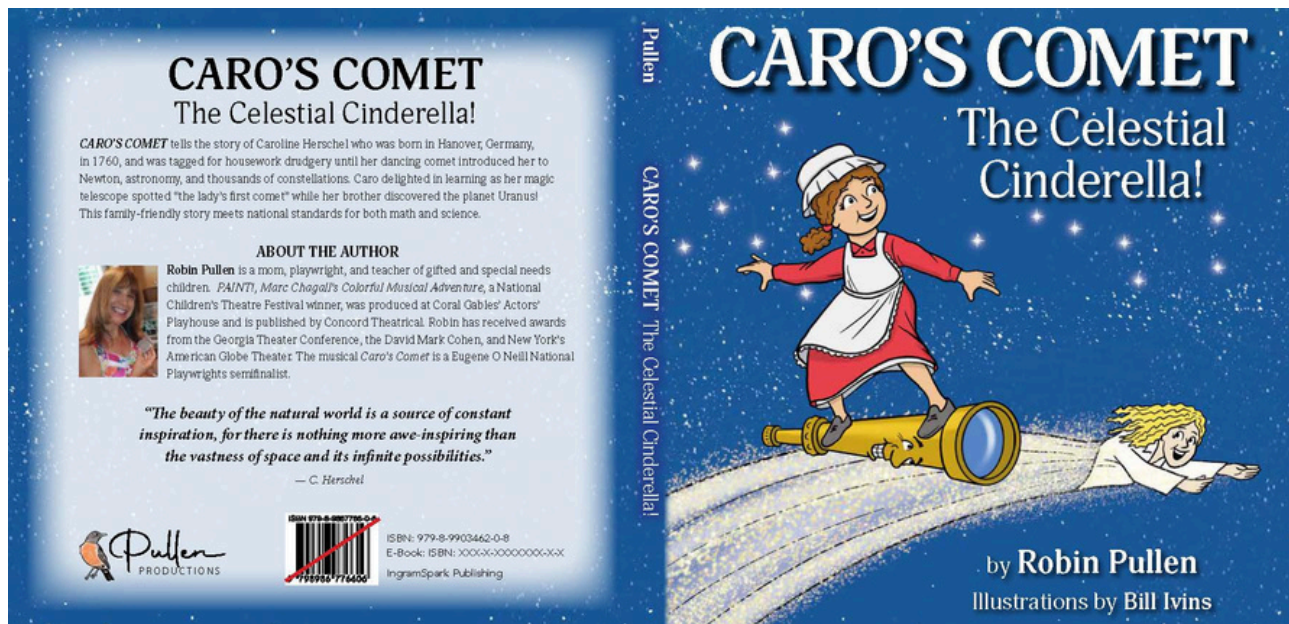
This book is an inspiration for young girls everywhere. Young Caro is determined to find a comet, but her family believes her only use to society is as a housemaid. Stunted as a child by the disease typhus, Caro is just over four feet tall, but her goal is sky high: to discover a comet.

With the help of a “magic” telescope, Caro attains her dream, becoming the first woman in history to discover a comet, to earn a salary as an astronomer, and to receive the coveted Medal of Honor.

Although this book is a work of fiction, it is a tribute to one of the hardest working astronomers of the 18th - 19th centuries: Caroline Herschel. Believed by her family

to be just a girl who would never marry (she didn’t) because of her childhood disease, Caroline became the discoverer of eight comets. She also cataloged thousands of nebulae in the sky, and was a perfect associate to both her brother William, who discovered the planet Uranus, and her nephew John, another astronomer. Caroline lived to the age of 98, and never stopped looking at the stars.

This book is one that every young girl should have on her bookshelf. It is written for ages 4 – 9, but, if a child has not yet learned to read, it should be read to her. If any girl believes that a successful future is impossible, then read Caro’s Comet, and learn otherwise.



Stories from the MAPS Region

Sun, Moon, and Stars

shared here by April Whitt

NOTE FROM THE EDITOR: *This is the latest in a multi-part series of stories shared by April Whitt. This story is from Myths and Legends of Southern Africa by Penny Miller, introduction by T.V. Bulpin, edited by Rosemind Handler, 1979.*

There are many tales told of the Sun, Moon and stars. Some stories say that the Sun was once a man from whose armpits shone rays of light. He dwelt alone in a hut and his light shone only for himself. Some children belonging to the first Bushmen were sent to throw the sleeping Sun up into the sky, from where he now shines upon all. In the evening, he draws his blanket of darkness over himself to keep warm. But the blanket is old and has many little holes in it, and at night the Sun still sparkles through them to make stars.



Another story tells of a lonely young girl who awaits the return of her hunter companions. To light their way in the dark of the night, she throws up a handful of white wood-ash. This becomes the Milky

Way, and even when there is no moon, it guides the hunters home.

The Moon, say the Bushman, is really an old shoe belonging to Mantis, who threw it up in the air to guide himself. As it rises, it is red with the red dust of Bushmanland, and cold like old leather. They say the Sun is jealous of the Moon when it is full, as it is a challenge to the Sun's brightness. So with its sharp rays the Sun cuts bits off the Moon until there is just a little left, and the old Moon cries: "Oh! Oh! leave a little backbone for the children!" Then the Sun goes away, and soon the Moon starts growing back, little by little, to its normal size - and the process starts all over again.

Some say that when the Moon is hollow and young, she is weighed down with the spirits of the dead which she carries. Clouds that pass are really the hair of the dead, and the wind blows to sweep the footprints of the dead from the sand. The Bushmen believe that world was made by the spirits which are all around them. Whatever tale they tell comes from within them, and as one Bushman says, "There is always a dream, dreaming us!" Without a story, a Bushman is without a home.

Stories from the MAPS Region

World Space Week at the Mystic Seaport Museum

by Brian Koehler

As you all surely know, World Space Week is celebrated from October 4-11 every year. At the Treworgy Planetarium in Mystic, CT, we offered FREE additional programming to our Museum visitors to coincide with this event. Activities included in our World Space Week series were:

- Take-home kits for kids to build space-related crafts
- Screenings of the “One Sky Project” fulldome movie, to share stories of cultural and indigenous astronomy
- “Visitors’ Choice” planetarium shows, where we invited visitors to vote on what live show they wanted to see (the best part about this was my presenters didn’t know what show they were giving until the very last moment!)
- An astronomy-themed trivia night in our dome
- A talk about the then-upcoming Europa Clipper launch by Dr. Ingrid Daubar from NASA-JPL
- A talk about meteors by Michael Greene, a NASA Solar System Ambassador

This year, we decided to extend our celebration by a few days, so we could provide a special exclamation point to the week-long festivities. On Sunday, October 13, we hosted two performances of Gustav Holsts’ “The Planets” in our dome, performed by an eight-piece chamber ensemble. This was a project that I have personally wanted to try in the dome for a

long time, but I have always been hung up on two major snags – the inability to accommodate musicians due to our theater’s fixed seating, and the inability to ever accommodate an orchestra worthy of Holst in our space.

One of those hurdles was cleared when we installed our new seats – the ones we got to share with everyone at the 2024 MAPS Conference – which afforded us the portability we did not previously have. The second hurdle was cleared with the help of my younger brother, Kevin Koehler, who is currently a music teacher up in Massachusetts. One of Kevin’s hobbies is creating different arrangements of musical pieces, so when I approached him about whether or not I could ever hear “The Planets” played live in our dome, he set to work on arranging it for an eight-piece ensemble.

By arranging our seats in three large semicircles on the west side of our dome, we freed up the entire east side for instruments, chairs, music stands. My brother was in charge of securing the musicians, scheduling rehearsals, and creating programs and other promotional materials. I was in charge of planning from the museum end, ticket sales, and creating a slideshow of historical images of each planet that would cycle on the dome during each movement of the suite.

(story continues on next page)

Stories from the MAPS Region

World Space Week at the Mystic Seaport Museum

(continued from previous page)

On the morning of October 13, the Koehler brothers put it all together with a dress rehearsal in the dome, before opening the doors to our sold-out crowd. The performances were super successful! Everything looked and sounded exactly as we hoped it would. The event was well-received by our crowds, and we received numerous compliments on this clever use of our planetarium venue.

As we make our plans for World Space Week 2025, we will want to consider an encore performance. And now that we have seen the flexibility that our new seats afford us, we can consider other outside-the-box creative ways to have different events in our dome and under our stars!

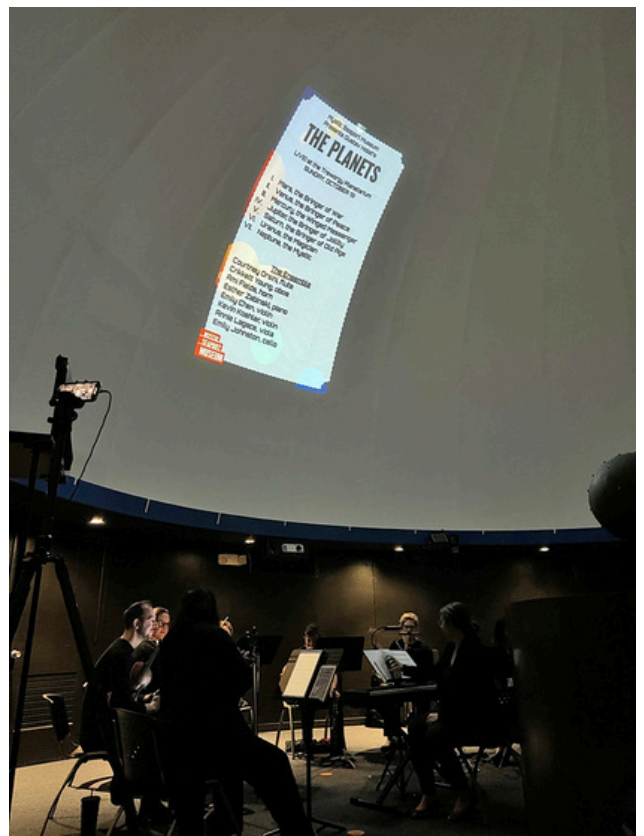


Who's that familiar face? A fellow MAPS member joined us for the first performance!

(photo credit: Jim Hendrickson and Francine Jackson)

Our eight-piece chamber ensemble about to begin the first movement of "The Planets."

(photo credit: Jim Hendrickson and Francine Jackson)



Stories from the MAPS Region

"Laser Show Man"

Lyrics by Patrick McQuillan

NOTE FROM THE EDITOR: *Per Patrick, these lyrics should be sung to the tune of "Piano Man" by Billy Joel. Enjoy!*

It's nine pm on a Saturday
 The museum crowd shuffles in
 There's an old man sitting next to me
 Hope-in' to hear Led Zeppelin again

He says, "Son, can you play me a memory?
 I'm not really sure how it goes
 But it's sad and it's sweet, and I knew it
 complete
 When I was high during the '70s shows."

La, la, la, di, di, da
 La, la, di, di, da, da, dum

CHORUS:

***Play us a song, you're the laser show man,
 Play some Pink Floyd tonight,
 We're all in the mood for Dark Side of the
 Moon,
 Hope there's an encore tonight!***

Now, Steve at the console is a friend of
 mine
 He fixes my Spitz for free
 And he's quick with a joke or some
 moonshine bespoke
 But there's someplace that he'd rather be

He says, "Ken, I believe this is killing me"
 As the smile ran away from his face
 "Well, I'm sure that I could be an
 astronomy star
 If Neil Tyson would get out of his place."

Oh, la, la, la, di, di, da
 La, la, di, di, da, da, dum

Now Kerri is a digistar programmer
 Who always has time for lasers
 And she's talkin' with Mikey, who's stuck
 in the Chalstey
 And probably will be for life

And Patty is dancing in fountains all night
 As the Planetarians slowly bemoan
 Yes, they're sharing a drink called
 Woodchuck Cider
 But it's better than drinkin' alone

CHORUS:

***Play us a song, you're the laser show man,
 Play some Pink Floyd tonight,
 We're all in the mood for Dark Side of the
 Moon,
 Hope there's an encore tonight!***

It's a pretty full dome for a Saturday
 And the museum director gives me a smile
 'Cause she knows that it's me they've been
 comin' to see
 To hear Taylor Swift for a while.

Stories from the MAPS Region

“Laser Show Man”

(continued from previous page)

And the subwoofers are shaking the
 dinosaurs
 And the constellation looks like a bear
 And they buy memberships so they can
 return here
 And say, “Man, what are you playin’ next
 year?”

CHORUS:

*Play us a song, you’re the laser show man,
 Play some Pink Floyd tonight,
 We’re all in the mood for Dark Side of the
 Moon,
 Hope there’s an encore tonight!*

Oh, la, la, la, di, di, da
 La, la, di, di, da, da, da



Excellence in education deserves extraordinary equipment.

When Prince George's County Schools needed to upgrade the Owens Science Center, in Lanham Maryland, quality could not be compromised. After all, the planetarium was designed by Margaret Noble and they are located, literally, across the street from NASA Goddard.

After careful consideration they chose a GOTO Orpheus Hybrid, a system that will fulfill the requirement for excellence for years to come.

GOTO, Ash Enterprises, and COSM are all honored to have been chosen to make this project a reality. Now let's see what we can do for your planetarium...



Sky by GOTO,
photos by Patty Seaton



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Contact : Mark Webb

Meet the Candidate: JAMES BAUMAN

Candidate for MAPS President-Elect

Hello! My name is James Bauman, the Planetarium Director for the North Penn Planetarium at the North Penn High School in Lansdale, Pennsylvania, and I am honored to be nominated for the position of MAPS President-Elect.

I have been a high school and middle school Physics teacher for almost 28 years, but it wasn't until 2011 that I discovered the joy of working in a planetarium. That was when my eyes were opened to a new world of teaching under the dome.

The problem that I faced, however, was my lack of planetarium experience. Fortunately, I discovered MAPS, and that led me to be introduced to some great people that helped point me in the right direction. With that guidance I began to feel comfortable in the dome, teaching with the wonderful equipment in the planetarium. I don't know where I would have ended up without the help that MAPS offered me.

Now I feel that it is my turn to give back to the planetarium world that has so enriched my life for the past 14 years. I am currently serving on the Constitutional Review



Committee in MAPS and was involved with the MAPS IDEA committee this past summer. Since the conference this past June, I have been working to try and grow our membership here in Pennsylvania. This is starting to show dividends, as I have recently created a PA Local Group of planetarium directors. It is my hope to see all of them at a future MAPS conference. Thank you for the consideration and nomination for the position of MAPS President-Elect. I look forward to continuing working with the MAPS community in the years to come.

Meet the Candidate: TIM COLLINS

Candidate for MAPS President-Elect

Hello friends, colleagues and fellow MAPS Members! I am honored to again be nominated for President-Elect of the Middle Atlantic Planetarium Society. I attended my first MAPS conference as a student in 1992 at the Carnegie Science Center/Buhl Planetarium in Pittsburgh, where I was introduced to a brand-new world of fellow educators and great friends. Last year, I was honored to receive the MAPS Fellowship award, and look forward to continuing to serve our community. I have been your Web Committee Chair since 2010, and am currently a Research Associate in Astronomy with the Buffalo Museum of Science, and available to continue contributions to the museum's Kellogg Observatory and portable Zygmunt Planetarium. I also served as a leading member of the Buffalo Eclipse Consortium for the 2024 eclipse, and recently have been elected to the Board of Directors of our local amateur astronomy group, the Buffalo Astronomical Association and the Beaver Meadow Observatory. Whether under simulated or authentic skies, I have always enjoyed presenting the cosmos to the diverse groups of visitors at any facility.

I have presented and written programs at the Whitworth Ferguson Planetarium under Dr. James Orgren, the Williamsville Space



Lab Planetarium, and succeeded the late Dr. Ernst Both as Observatory Manager for the Kellogg Observatory at the Buffalo Museum of Science. Over my career, I have also had the honor of working with our local media publicizing major astronomical events.

Today, I co-host The 7th Magnitude podcast, and continue to do outreach throughout Western New York at the observatories. I look forward to working with all of my colleagues in the Middle Atlantic Planetarium Society in enhancing the experiences of our guests and our colleagues at all of our facilities.

Thank you very much for your time!

Meet the Candidate: PATRICK MCQUILLAN

Candidate for MAPS President-Elect

I am honored to have been nominated, and if elected, I look forward to working with the MAPS membership and the Executive Committee to help make MAPS a valuable educational resource for MAPS members, schools, and the general public. The MAPS region is one of the most diverse planetarium associations in existence. As MAPS President, I hope to energize the membership to utilize our vast resources to engage all planetarians in the region (from portable planetariums to large science center planetariums). Together we can collaborate and develop programs that will make the MAPS region a model for planetarium program development and delivery.

My professional experience with planetariums includes Starlabs to the largest planetarium in the Western Hemisphere. I have seen many trends in the planetarium field with hardware going from totally manual to fully digital, and programming going from live to pre-recorded to virtual and back.



In these extraordinary times, planetariums are challenged more than ever to find ways to remain a relevant and trusted member of the community. The Planetarium should be seen as the go-to entity for consistently high-quality programs and exhibits, not only by the local audience, but also across the state and nationwide. I always strive to find the most innovative, scalable, and exciting way to develop programs. A program cannot just be good; it has to be outstanding! With your support, I hope to be given the opportunity to work with you to take MAPS to the next level.

Meet the Candidate: AMIE GALLAGHER

Candidate for MAPS Secretary

I remember my first trip to a planetarium. I was about eight years old. My mother took my sister and I to the Newark Museum. All I remember from that visit is that it was dark. Fast-forward to senior year of high school, and my church youth group went to the Hayden Planetarium in New York to see Laser Beatles. I had no idea at the time that soon, I would work in both of these fine facilities.

I have been an educator and show producer at the Newark Museum (Newark, NJ), Hayden Planetarium (New York City), and Raritan Valley Community College (Branchburg, NJ). I have been the Planetarium Director at RVCC for more than ten years. No matter how many years I work in a dome, I find something new to learn just about every day. One of the best parts about being a MAPS member is the opportunity to meet so many people. Attending in-person conferences is definitely the best, but virtual meetings are fantastic, too. Once I know a few people, I feel comfortable reaching out to them to ask questions. Because yes, even after 30+ years in the field, I still have questions. It's absolutely wonderful to hear about all the cool things people are doing in their planetariums!



Being Secretary of MAPS over the past few years has allowed me to help shape the present and future of our organization. I look forward to working with MAPS members near and far, as well as the Executive Committee, to keep lines of communication open and moving. We need to be in touch with each other more than once a year at conferences. After all, we are a community.

Meet the Candidate: CONNOR MARTI

Candidate for MAPS Treasurer-Elect

Thank you for the nomination! I'm Connor Marti, the Planetarium Assistant of the Edelman Planetarium at Rowan University. I have been in this position for three years, which would have surprised me if you told me that three years ago. I expected to quickly apply to astronomy graduate programs and return to the research side of astronomy that I knew best. Well, you people have drawn me in and are stuck with me for the foreseeable future. I hope you choose to be officially stuck with me as your MAPS Treasurer-Elect!

I am happy to see MAPS leadership consider the continuity of the organization with the creation of this officer role, and I encourage further investment in the future. MAPS should focus on strengthening the connections among our members. We should foster a greater sense of community, in particular among early-career planetarians who have fewer opportunities to attend conferences and meet other people in the field. At the Edelman Planetarium, we recently hosted a New Jersey meeting to share ideas, discuss future collaboration, and become closer as colleagues. I encourage other subregions to do the same, and I support continued funding to make these meetings sustainable.



I also strongly endorse the creation of the IDEA Committee. MAPS membership should better reflect the diverse communities we serve, and we should have the tools and skills to embrace these communities in our own domes. MAPS must consider the best ways to ensure this committee's success, including financial support where needed.

Thank you for your consideration for Treasurer-Elect. I'm looking forward to working with you in the future :)

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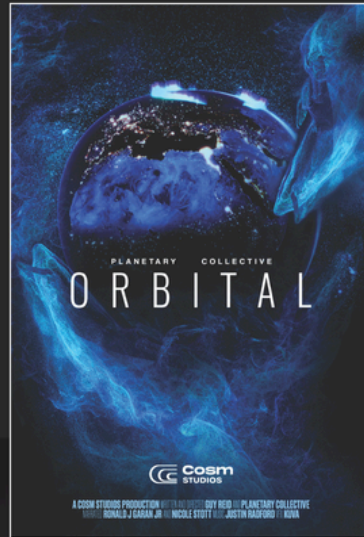
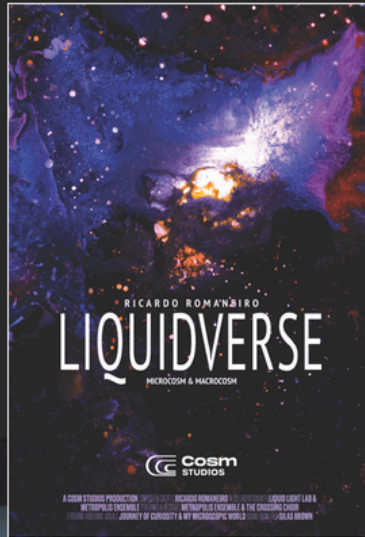
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MAPS Regional Meetings

“New Jersey State Meeting Recap”

by Amy Barraclough

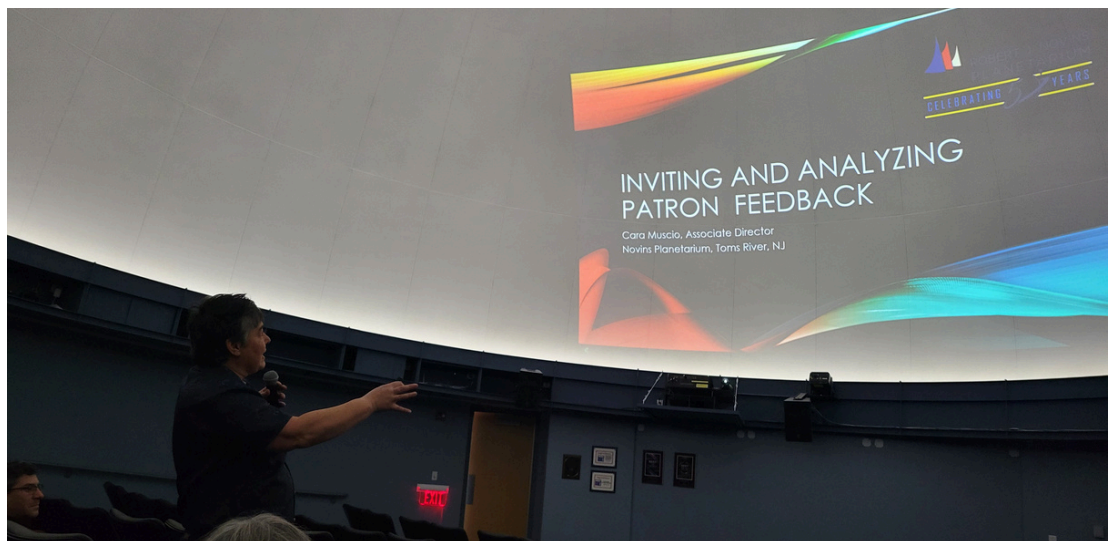
Planetarians from New Jersey and nearby Philadelphia gathered on November 18 at the Edelman Planetarium at Rowan University for a day-long state meeting and professional development. Attendees to the meeting spanned a variety of domes and regions across the state, from a mobile dome in Philadelphia, state and community colleges across southern New Jersey, and the largest planetarium in the U.S. - Liberty Science Center.

The day-long professional development workshop had several highlights, including interactive presentations on the moons of Jupiter, Girl Scout badge days, and the Perseverance rover. Rowan University Digital Media and Techniques students joined us for a presentation on Visual Storytelling by **Michael McConville**. The students and planetarians learned the importance of visual placement, movement, and difference, and how to tell stories using data.

The day also included programs on the business of running planetariums, including a presentation on audience evaluation by **Cara Muscio** of the Novins Planetarium at Ocean County Community College. They discussed their methods for measuring audience enjoyment, best-performing shows, audience demographics, and weaknesses. A panel discussion was also put together featuring **Mike Shanahan** at Liberty Science Center, **Denise Vacca** of Stars on the Move, a mobile planetarium in Philadelphia, and **Amy Barraclough** at the Edelman Planetarium. Michael McConville moderated the panel discussion with questions about obstacles to success and the methods and best practices for overcoming them.

The full-day meeting was only possible with the support of MAPS and the Spitz Regional Meeting grant, which provided funds to cover lunch for the meeting delegates.

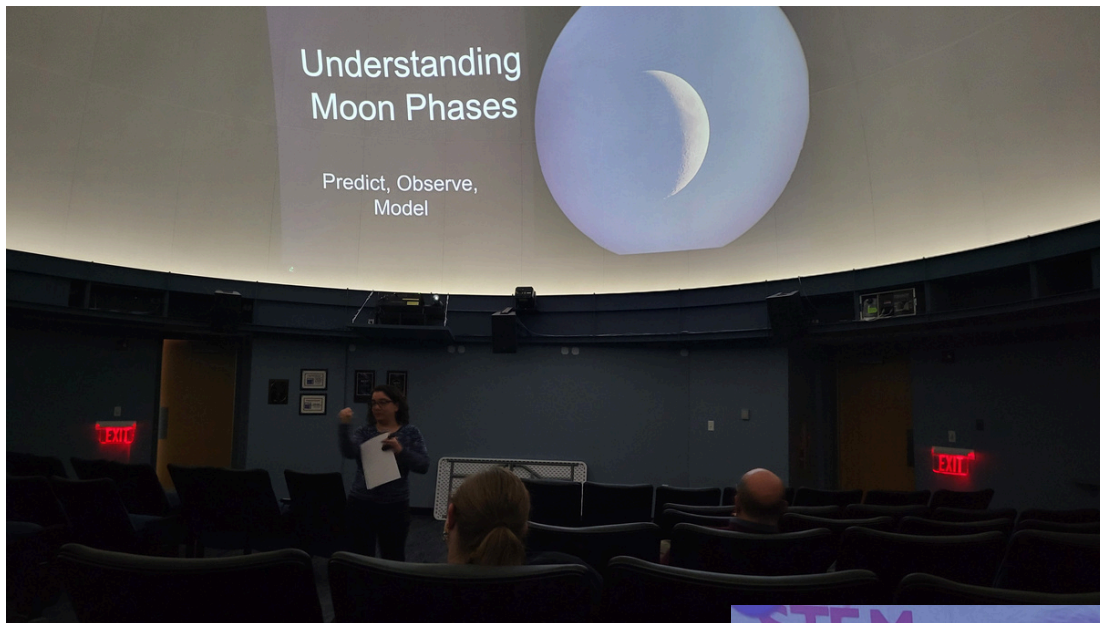
Cara Muscio leading a presentation at the NJ State Meeting



MAPS Regional Meetings

“New Jersey State Meeting Recap”

(continued from previous page)



Amie Gallagher leading a presentation at the NJ State Meeting



In-person (and virtual!) attendees of the NJ State Meeting

MAPS Regional Meetings

“DMV Planetariums Meeting Recap”

by **Patty Seaton**

We had an intimate meeting of the DMV planetariums (that’s DC, Maryland, and Virginia!) on December 11, 2024, hosted by the Howard B. Owens Science Center.

Patty Seaton proudly showed off her newly renovated theater, boasting a Spitz nanoseam dome, and hybrid GOTO Orpheus optical projector with Digistar 7. She demonstrated how she's using the system with her second graders to search for water in the solar system with the full dome program Oasis in Space. **Mary Clendenning** shared some of the amazing modifications she has implemented in her theater for sight impaired students in collaboration with her district vision

specialist. **Michael McConville** of Spitz/COSM shared some of the resources available on the cloud for Digistar users, as well as sharing program ideas appropriate for all. Finally, **Mark SubbaRao**, formerly of the Adler Planetarium and current Director of the Science Visualization Studio at NASA GSFC, shared some full dome visualizations available on their website.

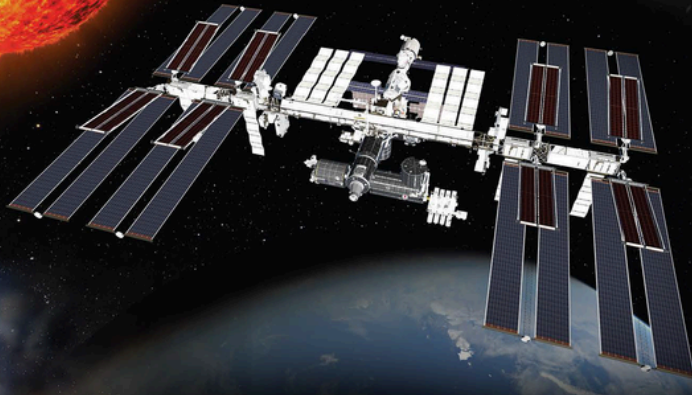
We all enjoyed being together and sharing ideas. We hope to do more meetings like this in the future, especially since some of our Community College planetariums had to administer finals!

*Group photo from the meeting
of DMV planetariums*

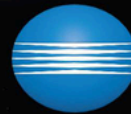
(DC, Maryland, and Virginia)



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MAPS Awards Committee Update

Committee Chair: Dr. Carlos Miranda

The MAPS Awards Committee is partnering with the Awards Committee of the International Planetarium Society to assist in the credential review process for the IPS Fellow Awards.



The IPS Fellows Award recognizes deserving members who have maintained continuous IPS membership in good standing for at least five years, and who have made substantial contributions in at least two of the following areas:

- Service in IPS office, committees, or organizing conferences / meetings
- Significant publications or conference presentations
- Collaboration with professional societies or organizations to highlight the importance of planetariums.
- Development of new methods or innovations in the planetarium field.

If any member (of both MAPS and IPS) meets the criteria or wishes to update their records for consideration, you can do so using [this link](#).

This is an opportunity to ensure your accomplishments are recognized and celebrated. The information you provide will help validate your contributions and support the nomination process.

Many thanks to the IPS Awards Committee for collaborating with MAPS!

MAPS Publications Committee Update

Committee Chair: Brian Koehler

Hello, everyone! I hope you are enjoying our winter issue of the Constellation. This is the seventh issue that I have had the privilege of editing since Noreen chose me as the Publications Chair in the summer of 2023. What I have learned in this short time is that the newsletter is only as good as the content that is submitted to it. And I'm sure you have all noticed that the quality of our content recently has been,

all pun intended, astronomical! You all have played a part in the resurgence of the MAPS Constellation, and we can all be proud of what we are assembling four times a year. I look forward to continuing my work with this exceptional publication, and I thank you all for continuing to send me the stories, photos, and even SONGS (?!?) that make the Constellation such a great newsletter!

MAPS Membership Committee Update

Committee Chair: Mike Francis

Things are progressing in Membership. As of today we have 120 paid up members, that's an increase of 20 from a year ago. We haven't set a goal for 2025, but getting to 150 would be reasonable. I know we have quite a few lapsed members; let's see if we can't get them back this year.

You should have gotten your renewal email by now. If you haven't, please drop an email to [MAPS Membership](#) and I'll send a new copy. We're still having some problems with delivery of emails getting to their destinations. This is a problem with many organizations and email servers rejecting or just dumping messages into the trash folder.

If you check your trash/junk folder and find messages from one of our MAPS email addresses, please add the address to your address book or your white list.

Just a reminder, membership runs from January 1 to December 31, so if you want to visit the website, keep getting access to the Constellation, and receive that invitation to the MAPS Annual Conference (2025 will be at the Irene V. Hylton Planetarium in Virginia), it's time to renew right now.

- You can renew [via Paypal](#)
- Send a \$25.00 check to: MAPS, % Mike Francis, 2143 Commonwealth Ave, Auburndale, MA 02466
- Or, request an invoice [via email](#)

MAPS Constitution Review Committee Update

Committee Chair: Mark Percy

The Constitution Review Committee is pleased to share that its members have unanimously voted to adopt the recently-proposed amendments to our Constitution and Bylaws. These adopted amendments have created a new pair of positions on our Executive Committee – the positions of Treasurer-Elect and Past-Treasurer – and ensure security in the line of succession in an extremely important role for our

organization. These changes go into effect for our upcoming January 2025 officer elections, so in that election, we will be seeking candidates for the offices of President-Elect, Treasurer-Elect, and Secretary.

Revised versions of our Constitution and Bylaws can be found on [this page](#) of MAPS website. Many thanks to all of the members who voted!

MAPS History Committee Update

Committee Chair: John Meader

On November 2, 2024 the Versant Power Astronomy Center's Jordan Planetarium held a 70th anniversary celebration marking the 1954 opening of the original planetarium at the University of Maine. It was the 9th university planetarium in the United States. Since its opening, it's hosted over a million visitors and has had several major renovations over the years. Currently, it boasts a 10 meter dome with a 4K digital projection system, which they are currently fundraising to upgrade to 8K.

The event featured speakers such as the University of Maine President Joan Ferrini-Mundy, John Flynn (the president of their sponsoring host Versant Power), Planetarium Director Shawn Laatsch, and past directors and staff Alan Davenport, John Meader, Scott Mitchell, and Nikita Saini, among others. It was a grand celebration followed by the showing of a variety of public shows through the rest of the afternoon and evening.



Shawn Laatsch addresses the group gathered to celebrate the 70th anniversary of the Jordan Planetarium.

Is your planetarium celebrating an Anniversary or other milestone?

Please contact our [History Committee](#) so we can share news of (and photos from) your celebration with the MAPS community!

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FUN & GAMES

MAPS-themed Puzzles

Grab a pencil and PRINT out the last few pages of this newsletter - you'll want to make sure your print settings are set to **only print pages 35-38**, otherwise you will get 38 total pages flying out of your printer!

PUZZLE #1: Guess the year...

This year was the first year that MAPS awarded its highest honor - the Distinguished Service Award - to our first recipient, Dr. Mark Littmann.

As always, here are some hints in case you don't know the year off the top of your head... HOWEVER, you will need to do some SERIOUS counting to get these numbers. Try not to forget any constellations!

The FIRST digit is the number of IAU constellations that start with the letter "R".

The SECOND digit is the number of IAU constellations that start with the letter "P".

The THIRD digit is the number of IAU constellations that start with the letter "S".

The FOURTH digit is the number of IAU constellations that start with the letter "L".

FUN & GAMES

MAPS-themed Puzzles

PUZZLE #2:

Solar System Word Search

Planets and Dwarf Planets

E	N	U	T	P	E	N	Q	P	T	R	U	P	A
J	U	P	N	S	N	U	T	A	U	U	R	L	R
U	N	A	S	I	R	E	T	N	R	U	T	A	S
P	I	E	T	T	T	Y	P	M	H	C	A	A	Q
I	R	R	Q	N	Y	R	U	C	R	E	M	S	U
T	R	J	M	U	A	N	R	E	M	E	A	L	A
E	E	P	H	E	R	A	T	U	R	N	R	C	O
R	M	A	S	N	H	A	A	R	E	O	S	A	A
A	C	A	T	K	T	H	N	S	T	J	A	A	R
R	T	E	A	R	R	S	E	U	U	N	U	N	N
M	O	U	R	M	A	E	L	N	S	R	J	E	P
U	R	H	S	E	E	P	R	E	A	E	A	M	U
U	E	N	C	R	S	A	U	V	P	R	M	E	M
T	U	H	T	E	M	A	K	E	M	A	K	E	S

Can you find the names of:

- EIGHT planets
- SIX dwarf planets

in this word search puzzle?

FUN & GAMES

MAPS-themed Puzzles

PUZZLE #3: Space Quote Puzzle

Can you drop the letters into the proper places to complete the quote about space? For a refresher on how to complete the “Fallen Letters Puzzle,” please see the last few pages of the Spring 2024 issue of the MAPS Constellation.

H	A	A				I									
H	E	R	E	L	A	N	D	E							
H	O	S	N	Q	O	N	L	E	D	E		B	A	E	
T	R	U	S	T	U	T	N	I	T	Y	A	G	L	S	E

							,								
				.											
										.					

--- NEIL ARMSTRONG

FUN & GAMES

MAPS-themed Puzzles

PUZZLE #4: Tracing Challenge

Our final puzzle for this issue is a NEW one! Using your pencil, can you trace over the following shapes WITHOUT lifting your pencil and WITHOUT going over any lines twice?

CRESCENT MOON

(Level: Easy)



STAR

(Level: Medium)



SATURN

(Level: Difficult)

