

## CONSTELLATION

The newsletter of the Middle Atlantic Planetarium Society


The BIG story...

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## 2023 BUSINESS MEETING MINUTES

## CONFERENCE

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## "Stars for All" brings the nation together

The 2023 National Planetarium Conference last month brought all U.S. regional planetarium organizations together for a week of networking and sharing. For some, it was the first in-person gathering since their planetariums had emerged and re-opened in a post-pandemic world.

This issue of the Constellation contains a number of updates from "Stars for All," including business meeting minutes, award winners, content from talks and workshops, and of course, photos!

Many thanks to Adam Thanz and the staff of the Bays Mountain Park \& Planetarium for hosting the 2023 "Stars for All" Conference!

## President's Message

by Noreen Grice

Dear MAPS members,

It is my honor to begin a two-year term as President of the Middle Atlantic Planetarium Society. I thank Brian Koehler and April Whitt for their leadership, and I hope to continue to expand the scope of MAPS. The Executive Committee and the new President-Elect, Tony Kilgore, will be helping me along the way, but I need your help, too!

When I was a candidate for President-Elect in 2021, I said in my candidate statement:

## "As MAPS President, I'd like to introduce a focus on engagement, connection and communication, beginning within the planetarium community and extending to those we serve as learners."

As a first step in this new focus, we want to strengthen connections among people working in different areas of the planetarium field so everyone can communicate with others who have similar interests, skills and experiences, and "speak the same language." As our first step to enhance engagement, we have created new MAPS affinity groups. These groups are organized by type of facility, work and interest. We have planetarium affinity groups for mobile dome users, planetariums
in museums and nature centers, colleges and universities, $\mathrm{K}-12$, planetarium consultants, unaffiliated planetarium educators and telescope or observatory users. There's something for everyone, but feel free to join more than one group! Stay tuned for information on how to join our MAPS affinity groups, and how members of each group can connect virtually!

Another way to engage with other MAPS members is by joining a committee. There are eleven MAPS committees. Being part of a committee is a great way to meet new colleagues, help MAPS, and gain experiences that you can document on your resume! We are especially looking for MAPS members to join the membership committee so we have at least one MAPS representative per MAPS state.

Are you retired or in a position to help new planetarians? There is a MAPS mentor network where you can be a hero to someone who needs guidance in the planetarium field. Are you on LinkedIn? MAPS is, too! Are you on Facebook? MAPS has a Facebook page!

There are so many ways to get involved with MAPS! Please consider joining one of our many opportunities. We are stronger together!

Happy Summer!

## 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:

## Lee Ann Hennig

Summerville, SC

## Paul J. Krupinski

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

## Patty Seaton

Howard B. Owens Science Center Lanham, MD

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 or ad, please contact us at publications@mapsplanetarium.org.

## Connect with MAPS!

Click here to JOIN our groups.io forum! This is the new home of MAPS-L, where all users can post and share astronomy and planetarium
 content.

Click here to LIKE and FOLLOW the Middle Atlantic Planetarium Society on Facebook!

Click here to FOLLOW the Middle Atlantic Planetarium Society on LinkedIn! We have a new presence on this platform to share updates about job postings, planetarium renovations, and other professional news.

And last but not least, our website has a members-only section that includes our Constellation newsletter and our mentoring network. And we are considering some new member content for our website, including a MAPS Member Directory.

## "Stars for All" Conference Memories

Last month's conference was a truly memorable gathering, as over 300 planetarians from all corners of the United States gathered
in Kingsport, Tennessee for a week of teaching, learning, sharing, and connecting.

Here are a few photos and captions/stories that MAPS members have taken and shared to recap the "Stars for All" experience!

Photo credit: Amie Gallagher


Steve Russo manages to land a perfect "selfie" featuring [front row] himself, Noreen Grice, Jan Russo, Sam Storch and [back row] Jason Statham, Ben Ponce, Brett Jacobs, and Eric Melenbrink.

Photo credit: Noreen Grice (with a BIG assist to Steve!)

A total of 31 first-time conference attendees were able to call "Stars for All" the first planetarium gathering they ever attended!

Photo credit: Amie Gallagher


## "Stars for All" Conference Memories



Best girl friends to the rescue! April Whitt was dismayed to find that she had left her "fancy dress" at home. This left her resigned to wearing jeans for the banquet. Without hesitation, Oana Jones and Francine Jackson offered to wear jeans too, in solidarity with April. That, friends, is how you turn a plight into a TREND!

Photo credit: April Whitt


Susan Button, Paul Krupinski, and others participated in a workshop, working with resin and a hardening agent to create toscale models of the Earth and Moon.

Photo credit: Paul Krupinski


## "Stars for All" Conference Memories



The "local cluster" of Northern Virginia planetarians: "Sunny", Tony Kilgore, Melissa Hamilton, and Mary Clendenning.

Photo credit: Tony Kilgore

The first meeting of the Astrolabe Book Club! Door prize winners pose with their new additions.

Photo credit: Patty Seaton

(from left to right)

Elliot Severn, Jacque Benitez, Beth Dry, and Amie Gallagher.

Photo credit: Amie Gallagher

Frank Summers, Martin Ratcliffe, Carolyn Slivinski, Carlos Miranda, and Mike Francis.

Photo credit: Amie Gallagher


# No reason to do without a brilliant starry sky. 

## Ken Yager

Salès Representative for Seiler Instrument
Mobile: (828) 380-9539
Direct: (828) 649-1018
Email: kyager@seilerinst.com

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# MAPS Business Meeting Minutes 

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## MAPS Business Meeting Minutes

Kingsport, TN
June 23, 2023

## Summary:

36 members in attendance.

Meeting called to order at $12: 50 \mathrm{pm}$.

## Secretary's Report:

- The minutes from the 2022 Business Meeting in Maine had been emailed out ahead of time.
- A QR Code was projected which linked to the Minutes for anyone to review today.
- Sam Storch motioned to approve the minutes as written. Francine Jackson seconded. All voted to approve.


## Treasurer's Report:

- The Society currently has $\$ 53,281.43$ in assets. We have not yet gotten the invoice for the 2023 Stars for All Conference.
- Last year's conference in Maine cost just over $\$ 22,000$.
- For more detailed numbers, please contact Mike Francis, Treasurer.

As of June 1, 2023, we have some new officers. Noreen Grice is now President. Brian Koehler is Past-President. Tony Kilgore is President-Elect. Mike Francis and Amie Gallagher continue in their positions as Treasurer and Secretary, respectively.

We are creating MAPS Affinity Groups based on interests. These will allow us to communicate more frequently than once a year at a conference. You'll be able to choose which group(s) you want to join:

- Mobile dome users
- Museum and nature centers
- College \& Universities
- K-12 Schools
- Planetarium/astronomy education consultant
- Unaffiliated planetarium educator
- Telescope users

There was discussion on having a group called Retirees, or Mentors, or Alumni.

Committee Reports were shared by their Chair or by Noreen...
(NOTE FROM THE EDITOR: Committee summaries will follow here. Please see pages 24-32 of this issue for updates from each MAPS Committee in greater detail)

# MAPS Business Meeting Minutes 

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## Audit:

- Paul Krupinski reported that we had an election last January for President-Elect, Secretary, and Treasurer. Tony Kilgore, Amie Gallagher, and Mike Francis were elected.
- The next election will run from January 15-31, 2024 for three Board positions. Paul nominated Stephen Dubois. Patty Seaton seconded. We are looking for nominations.


## Awards:

- 5 Fellow awards are being given during this Conference: Stephen Dubois, Mark Percy, Carolyn Slivinski, Noreen Grice, Mike Francis.
- April Whitt received an Exceptional Service Award.
- Later in the conference, 1 member will receive the Distinguished Service Award at the Banquet. (Edited later: Steve Russo was presented with the Distinguished Service Award.)


## Constitution Review Committee:

- Reviewed current version of By-Laws.
- Recommendations were made and sent to President.
- Recommendations will be sent out to all members via multiple formats, to be voted on soon.


## Education:

- Presented by Susan Button for Lee Ann Hennig.
- Looking for more members and regular contributions to The Constellation. Articles can be how-to's, tips and tricks, lesson plans/outlines, etc.


## Elections:

- Nominations and Seconds must be submitted to Kevin Williams in writing by November 1st.


## History:

- John Meader has boxes of information.


## Membership:

- 90 members are in good standing.
- Mike Francis is trying to automate as much as possible.
- Added Cara Muscio as another member to the committee. Need more committee members.
- Noreen reminded that the State Leaders will be part of the Membership Committee.


## Memorial:

- Owen Gingerich added to Memorial Page


# MAPS Business Meeting Minutes 

Page 3 of 4

## Program:

- 77 people attended conference in Maine in 2022.
- Now, in June 2023, a national conference is being hosted in Kingsport, Tenn.


## Publications:

- In May 2023, Chair changed from Kevin Conod to Brian Koehler.
- Next issue of The Constellation will be summer 2023. Anyone who is attending the TN Conference is encouraged to send their presentation to Brian.
- More people welcome to join this Committee.


## Website:

- Thanks to Janet Stearns for her past work on the website.
- Tim Collins (Chair) and several others were trained on how to update the website, and have now taken over from Janet.


## 2024 Conferences:

- In light of time and cost of going to or hosting Solar Eclipse 2024 events and IPS in Germany, we will have regional conferences in multiple states instead of one regular conference
- Sept 12-13, 2024: Mystic, CT
- Looking for 1-2 more locations/ dates.
- You can apply for the Armand Spitz Regional Conference Grant. (\$200)
- If interested, contact Tony Kilgore as Program Chair.


## Old Business:

- Patty Seaton reported that the Strategic Planning Committee is an Ad Hoc Committee that convenes every 7 years. The SPC is recommending that change to every five years. Steve Mitch is the current Chair. The other members are Patty Seaton, Paul Krupinski, Lee Ann Hennig, and Susan Button. Last time, they created an Executive Handbook. Now, it's been updated, and may become available to all members.
- Their job is to look at strengths and weaknesses to make recommendations for growth of the Organization.
- Currently updating Executive Handbook, By-Laws, Constitution, following up with Executive Committee to ensure that Society tasks are completed in a timely manner.
- SPC also recommends that the Executive Committee meet monthly rather than quarterly.


## IPS Review:

- The IPS 2024 Conference will be in Berlin and Jena, Germany. Includes FullDome Festival. The dates moved from June 2024 to July 2024 because Berlin is hosting the EURO 2024 soccer tournament, and hotel and venue costs went up significantly.
- Japan won the bid for 2026.
- Centennial of Planetarium. We should be doing something as MAPS. Our region includes some of the first planetariums in the United States.


# MAPS Business Meeting Minutes 

Page 4 of 4

## Email:

- It has come to the Executive Committee's attention that not all MAPS members are on the Groups.io forum. The Publications Committee will put a note in The Constellation about how to join Groups.io.


## Affinity Groups:

- The meeting brought back a topic introduced earlier: forming a Retiree / Mentor Affinity group. Discussion included whether there's a need or purpose for a Retiree group. Could you be a Mentor if you weren't retired? Ultimately, the idea of a Retiree / Mentor group was dropped.
- Kevin Schindler circled back to the broader question: what's the purpose of these groups?
- Noreen explained that these will be interest groups that one can join to find other people who are in similar situations, like working in a K-12 setting, or who have telescopes for public viewings. There will be a Committee chair to coordinate members of each group.

For the Good of the Order / General Announcements:

- Dani LeBlanc: IPS DEI is doing a survey of pay. We are collecting data about how much people get paid around the country / world. This will give fuel for people looking for equitable pay. Full-, Part-Time, and Volunteers are all good and useful data points.
- Stephen Dubois: it's been five or more years since we've gotten any applications for Education Grants. Is it still a thing? We have money to give out.
- Mike Francis: we don't know what money we have set aside for grants. It's been incorporated into a general budget, sometime before Talia and Mike took over.
- Stephen: there used to be a $\$ 10,000$ line item for it.
- Mike: we also had no idea how much money we had for scholarships.
- Susan Button: we're supposed to have $\$ 500$ for someone to host an international person in our region. The host needs to apply for it.
- Patty Seaton: there is a list in our Executive Handbook about these categories. It's concerning that we don't have a record.
- Talia Sepersky, Keith Johnson, Steve Russo, and Sam Storch are the previous Treasurers. Perhaps one of them has records?

Motion to adjourn: Paul Krupinski. Seconded by Stephen Dubois

Adjourned at 1:57 pm

Respectfully submitted,
Amie Gallagher
MAPS Secretary


AUDIO
Next Gen Theater Automation to Control New and Old

Theater Devices

MANUAL PANELS

# "Stars for All" Presentations 

Stars for All: Including Those Who are Blind or Visually Impaired<br>by David Hurd (Penn West University) and Noreen Grice (You Can Do Astronomy, LLC)

## Provided by David Hurd:

David Hurd at Pennsylvania Western University in northwest Pennsylvania has developed several tactile books with colleagues Cass Runyon at the College of Charleston and Joe Minafra at NASA. Recent books (https://sservi.nasa.gov/books/) highlight the eclipses of October 2023 and April 2024 and also light pollution. A descriptive text accessed through a QR code on the cover highlight each tactile graphic. If interested in obtaining copies of this resource, please contact Hurd at dhurd@pennwest.edu.

## Provided by Noreen Grice:

Thirty-nine years ago, my life changed when I was giving a planetarium show in Boston. A group of blind students came to the planetarium and attended a pre-recorded show. Afterward I asked them how they liked the program and they said that they didn't like it because the program wasn't accessible. It had never occurred to me that astronomy was not accessible until that group came to the planetarium. This bothered me. I did some research and found that there weren't very many accessible resources available in astronomy, and there were very few images that were touchable. I made it my personal mission to figure out how to make astronomy more accessible to blind and visually impaired learners.

Over the years, I have written books and designed tactile graphics for NASA exhibits. I've created and taught hands-on teacher and student workshops. Some of my books
are no longer in print, but I'd like to show you some of the books and tactile graphics that are available. I have links for all of these resources on www.youcandoastronomy.com.

I'll begin with materials about the Sun. I designed colorful tactile Sun images that include a variety of solar phenomena and can be useful for outreach events. Examples of tactile images that are available include Earth-Sun size comparisons, the solar interior, sunspots, erupting prominences, coronal loops, coronal mass ejections, solar activity and multi-wavelength solar images.

I've collaborated recently with famed planetary astronomer Dr. Heidi Hammel, to create a digital book called Touch the Solar System. This book contains a set of sixteen individual colorful tactile images of solar system objects, which is used with a unique tablet called the Talking Tactile Tablet (T3). Each tactile image has a special QR code that is designed to work with the T3 only (and not a cell phone). The learner places a tactile picture on the T3, and as they touch different parts of the image, the tablet verbally describes information about the specific areas that are being touched. Simultaneously, the T3 also visually displays the same narration as text on another part of the tablet. If you are a blind or visually impaired learner, the material is accessible to you by touch and verbal narration, and if you are a deaf or hearing-impaired learner, the material is accessible to you by touch, and displayed through illuminated captions. All of the solar system images are touchable, and the book's information is available to learners in different formats. It

## "Stars for All" Presentations

is universally designed for multiple learning styles.

My very first book was called Touch the Stars; it came out in 1990. It's now in its fifth edition and recently received favorable reviews in both Physics Today and Sky \& Telescope magazines. Touch the Stars has been an important resource because it is used in many planetariums as a tactile resource. This is a book that has print and Braille text pages and a variety of astronomical images that are touchable and of the kinds of objects you would probably include in any planetarium show. The 19 tactile images in Touch the Stars are: The Big Dipper, Finding Polaris using the Big Dipper, Lyra and the Summer Triangle, The Ring Nebula, Orion, The Orion Nebula, Motion of the Planets, Waxing and Waning (lunar phases), Lunar Orbit, Total Solar Eclipse, Total Lunar Eclipse, Planets of our Solar System, Jupiter, Saturn, Comet, Meteor Shower, Milky Way Galaxy, Globular Star Cluster, and the Northern Deep Field of Galaxies.

It is easy to imagine that you would be describing at least one or two of the objects from Touch the Stars in a live planetarium show. Many planetarians working in fixed and mobile domes have a copy of Touch the Stars handy so that they can pull it out quickly, when needed, for an accessible resource.

Over the years, educators have contacted me to say that they feel a little uncomfortable about teaching people with disabilities because they don't know what to
do. Other groups of people have contacted me saying that they have a disability and don't know where to go to learn about astronomy that is accessible to them. I decided to combine these points of view in a book called Everyone's Universe: A Guide to Accessible Astronomy Places. The first part of the book provides tested methods and best practices for making astronomy accessible to people who have mobility disabilities, visual disabilities, neurological disabilities, communication disabilities, and hearing disabilities. The second part of the book is a travel guide to different planetariums around the country, and demonstrates accessible strategies they have made available; this allows the reader to gain ideas from what other planetarians have done.

One other resource I've added is very different in that it's not tactile and has nothing to do with Braille. I've created a historical portrayal of astronomer Maria Mitchell. I credit Mike Francis and Galileo for bringing me into historical acting. I have portrayed Maria Mitchell with Galileo at the National Air \& Space Museum in Washington, DC. Bringing a historical character to life provides a different kind of accessibility where a wider variety of learners can learn about one of America's first woman astronomers who became a role model for girls in science.

I've put all these resources together in one image with a QR code that takes you to youcandoastronomy.com and the specific ways to access each of the resources mentioned in this paper.

Maria Mitchell Living History Portrayal. Her story began with a solar eclipse!


Colorful Tactile Sun Images Great for eclipse events!


Touch the Solar System Tactile Pictures

Everyone's Universe Award-Winning Educator Book


Print/Braille text with tactile images including star patterns, moon phases, eclipses, planets, a comet, a star cluster, nebulae and galaxies!


# "Stars for All" Presentations 

New Visualization Examines Stephan's Quintet in Visible, Infrared, and X-ray Light by Frank Summers

The AstroViz Project of NASA's Universe of Learning has released a multi-wavelength visualization of the compact galaxy group Stephan's Quintet. Using data from Hubble, Spitzer, Webb, and Chandra, the sequence contrasts the galactic structures revealed across the electromagnetic spectrum.

Exploring the grouping in three dimensions, the video showcases the galaxy distances, diverse shapes, and the interactions between them. In particular, the stretched and distorted galactic features, along with a ridge of high-energy emission, provide evidence of a high-speed collision occurring within the group.

Extending this visual experience is an auditory investigation via sonification. While sweeping across the image, the different types of astronomical objects are portrayed as different sounds to create a symphony-like experience. These projects add to the tactile experiences previously developed, enabling the striking capability to see, hear, and feel Stephan's Quintet.

Universe of Learning Press Release
Visualization
Sonification


A still from the visualization shows the distorted galaxy NGC 7318B using infrared (Webb) and $x$-ray (Chandra) observations.

# "Stars for All" Presentations 

Exploring the Underground Railroad Using Codes<br>by Amie Gallagher (Raritan Valley Community College Planetarium)

To enhance our Black History Month presentation of "Follow the Drinking Gourd," our planetarium worked with RVCC's Paul Robeson Institute, Diversity, Equity, and Inclusion director, the Black Student Association, and the Astronomy Club to provide eight hands-on activities inspired by the Underground Railroad. On display were hand-made quilts featuring squares that might have given enslaved people clues along their journey towards freedom. The activities were designed for families with children ages 6 and older.

In the Planetarium, you could watch:

## Follow the Drinking Gourd

Annual program during February to recognize Black History Month.

Show includes

- Seasonal Sun Paths
- Current night sky star ID, including the Big Dipper
- Recorded program describing the meanings of the lines in the folk song
- Reading the book by Jeanette Winter


Inspired by the book "Hidden in Plain View," we took some of the quilt squares and created activities to go along with them:

Hidden in Plain View:
A Secret Story of Quilts and the Underground Railroad
by Jacqueline L. Tobin, Raymond G. Dobard, et al.


## "Stars for All" Presentations

We had several quilts on display that featured these different quilt squares. The quilts were made by three different quilters:



Log Cabin


LOG CABIN:

You've reached a safe house. Congratulations! You have found new friends who are friends of slaves.


Keep going, and travel to the crossroads in Cleveland, Ohio. Nicknamed "Hope," this vibrant Underground Railroad Station was the last stop where slaves would board a boat to Canada.




Crossroads, Star
Quilts loaned from an employee on campus.

## "Stars for All" Presentations

Families picked up an activity guide either in the Planetarium or in the first classroom. It describes the different activities they will encounter. Families received a stamp in each of four classrooms. With four stamps, they found freedom in Canada:


Rhonda
Stewart, Manager of the Paul Robeson Institute, read a story to visitors that introduces the quilt squares and the Underground Railroad.


Build a Safe Room with LEGOs.

Write a letter of good wishes to an escaping person.


## "Stars for All" Presentations

Match animal pictures to their tracks.

It is important know local animals, to avoid them or to follow them, for food or water.


Quilt Codes, Stories, Songs

They all tell us about secret messages. Color a page and then reveal the message when you look through a red filter.


Follow the North Star to find your way to Canada and freedom.

Visitors made star finders.


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## ALᄂ NEW SCIENCE AND VISUALS

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## Stories from the MAPS Region

A Jovian "Message in a Bottle"

by Kevin Conod, County College of Morris

As you likely know, NASA is working on a new mission to visit Jupiter's moon Europa. The European Space Agency (ESA) also has a spacecraft headed to Jupiter. ESA launched its Jupiter Icy Moon Explorer (abbreviated JUICE) recently on April 14. NASA will follow with Europa Clipper. It has a launch planned for October 2024 and is scheduled to arrive in 2030. Although the launch takes place more than a year later, it will beat JUICE (which will arrive in 2031). JUICE will focus on Ganymede, while the Clipper will study Europa's icy crust and probe the subsurface ocean. For more information about these missions,
 visit the Europa Clipper website or the JUICE website.

In preparation for this exciting mission, NASA asked U.S. Poet Laureate Ada Limón to write an original poem dedicated to the Europa Clipper. NASA recently released the poem and is offering the public a chance to send a "message in a bottle" to Jupiter as a message from humankind. This, I think, is a nice opportunity for planetarians to engage students and visitors, as well as a chance to do some interdisciplinary activities. To sign, read the poem or hear Limón recite the poem in an animated video, click here. The deadline to send your name is December 31, 2023.


# Stories from the MAPS Region 

## World Ocean's Day at Mystic Seaport Museum

by Brian Koehler, Treworgy Planetarium



At our Museum, we were able to connect this performance to our newest exhibit, an art installation titled "Oceanus." This 11 -work watercolor collection, commissioned to become a permanent part of our Museum's collection, consists of works that depict modern maritime issues such as climate change, invasive species, and tsunami displacement of ecosystems. Together, the art gallery and the planetarium performance combined to create a special afterhours experience for visitors to celebrate World Ocean's Day on the evening of Thursday, June 8. We added a second performance on June 11, to enable more visitors to enjoy this experience.

World Ocean's Day is celebrated every year on June 8. This year, the Treworgy Planetarium at Mystic Seaport Museum was able to arrange a very special event to mark this occasion. We contracted with Embodied Sounds, Inc. to bring "Sounds of the Ocean" to our Planetarium. This performance uses live music and fulldome video of underwater animals to create a mindful underwater journey, a pleasant and meditative experience for visitors. The performer, Joshua Sam Miller, employs a variety of instruments including clarinet, saxophone, and hand pan to provide a complementary live soundtrack to the visuals upon the dome.


What made this event especially noteworthy is that, for several reasons, we would not have been able to do anything like this in our Planetarium until very recently. Some of our newest upgrades are making events like this possible:

- Our Warped Media fulldome projector was installed (by Ash Enterprises) in 2019, but we were only able to truly unleash its power following our post-pandemic reopening.
- Our new theater seats from Sedia (also installed by Ash Enterprises) arrived in 2022, and the moveable seat bases now allow us to configure our theater in different ways to accommodate unique events like "Sounds of the Ocean."

I understand that a representative from Embodied Sounds was at the "Stars for All" National Conference last month. If anyone is considering bringing "Sounds of the Ocean" to their venue, I would be very happy to chat about my experiences with this company, and to share some of the great "lessons learned" that my team and I have gained from this amazing experience.

## Stories from the MAPS Region

In the category of＂MAPS Members on the move＂．．．Joyce＂JT＂Towne wishes to share that she has formed Omnidirectional Consulting， and now works as an independent consultant


Consulting for planetarium projects．


Patty Seaton has a new projector！

Ken Wilson from Ash Enterprises would like to remind everyone to be careful，as drool has been proven to void your projector＇s warranty！

We look forward to hearing more soon from Patty about the renovations of the planetarium at the Howard B．Owens Science Center．

## Impress your guests from the moment they enter your planetarium．

Big dome or small，automated or manually controlled，LED lighting from ChromaCove is ready to take your audiences to the next level．

# Stories from the MAPS Region 

Being in the Shadow: Stories of the First-Time Total Eclipse Experience

Book Review by Francine Jackson



#### Abstract

It seems surprising that there hasn't been too much publicity concerning the October annular solar eclipse; however, next April's total eclipse, the last in the continental U.S. for over two decades, should be shouted everywhere.


True, there are people for whom the event doesn't mean much, but, sometimes that feeling can change. Russo's book shows this.

A trained psychologist and avid eclipse chaser, Russo interviewed persons living near the 2012 total eclipse path in North Queensland, Australia. For some, the first thought was, "Whatever," something was going on, but it wasn't important. However, as the date came closer, there seemed to be more information, and consequently more curiosity, that perhaps it was something to watch for. One man, a self-described storm-chaser, had put an eclipse on his bucket list; another only became interested when he learned there would be an "Eclipse Festival" taking place on the path of totality.

But, then came totality. All doubt as to the beauty of this event was over. Nature seemed to change around them: insects began their night sounds; the daylight was awash in dimness; gasps of wonder came from everyone observing. The eclipse became a time of magic, where life seemed to change, not only for the creatures, but for humans, also. Every one became determined to watch another one, although expenses would prevent some from doing so.

Dr. Russo's moral to her book is that everyone, regardless how much doubt there is in the beginning concerning a total solar eclipse, viewing one can change even the most persistent doubter. And, as astronomy educators, it is up to us to do our best to follow the examples Russo has in her book. For many of us, next year's magnificent event may be our last chance to view one easily; and, we should have a whole group of new observers with us, to remind them of the beauty of the sky. If you don't believe those who aren't nature oriented wouldn't be interested in watching this, read Russo's book, and see how this idea can change, in this case, with just two minutes of totality.

# Stories from the MAPS Region 

## Earth Science for Mercurians

by 489730.22
translated from Midspeak by Thomas Wm. Hamilton

## NOTE FROM THE EDITOR: This is the first in a four-part series of science fiction stories written by Tom Hamilton. Please enjoy this satirical look at how Earth and its Moon might be viewed from a different vantage point in our solar system.

Studies of the other planets around the Sun have determined some surprising details. Here we look at the third planet, and its companion planet.

The third planet has a thick surrounding of gases, although not nearly as much as the second planet. Interestingly its companion planet has none, in contrast to our very thin combination of helium and argon. I well remember sitting near 376821.32 when he discovered that the third planet's gases include one percent Argon. He started yelling excitedly, "It's got Argon!" Too bad this is one of the few similarities to our planet.

Argon is trivial at one percent, unlike the $30 \%$ among our very thin gases. The two main gases on the third planet are nitrogen, which is relatively passive, and so harmless; and oxygen, which is dangerously reactive. Some radical chemists actually argue the presence of oxygen must mean some sort of life exists there, renewing the oxygen. Most dismiss this as nonsense, but I'm sure some of our more imaginative writers will find the idea inspiring exceptionally creative stories.

Gravity on the third planet is nearly three times what we experience. Definitely uncomfortable. By contrast its companion planet has surface gravity a bit less than half ours. Definitely bouncy.

Temperatures on the two are confusing. The big planet has a fairly narrow range of temperatures, ranging from a high a quarter of our highest to a low much warmer than we experience. The smaller companion has a wider range, but nothing approaching either our warmest or coldest. Some astronomers have suggested the big planet's thick atmosphere may be responsible, somehow moderating temperatures. Difficult experiments will be needed to resolve this puzzle.

The temperature swings combined with the thick gasses surrounding the third planet means that H 2 O , found here as a solid on the floors of many polar craters, can exist there as a liquid or solid, or even as a vaporous cloud.

The third planet seems unsuitable for most purposes except perhaps some studies of geology in high gravity conditions. Certainly no one will be tempted to risk health and life by prolonged exposure to such gravity and the oxygen gas. But the companion planet looks very promising. Granted it has a much lower density, suggesting fewer valuable metals, but gravity, temperature and similar considerations look promising.

# Stories from the MAPS Region 

Mouse and Sun: A Canadian Tale

adapted by Amy Friedman<br>shared here by April Whitt

## NOTE FROM THE EDITOR: This is the first in a multi-part series of stories shared by April Whitt. This story originally appeared in the Kids Page of the Atlanta Journal and Constitution.

Once long ago, when animals still ruled the world, the sun ran into trouble with a little boy.

The boy and his sister lived in the forest, far away from other people. The girl did her best to raise her brother. She made him a home in a cave. She worked hard to feed and clothe him. To keep her brother warm, she made him a coat out of the hides of the animals of the forest. When the boy wore the coat, he did not feel the cold. He loved his coat with all his heart.

One day as the boy and his sister were walking through the woods, the boy suddenly stopped and listened to the wintery silence.
"Sister," he said at last, "why are there no other people in the world besides you and me?"
"Our mother told me before she died that the other people live far away from here," the sister said. She pointed at the distant mountains. "See over there in the mists? That is where they live."
"I'd like to go see those other people," the boy said.
"We are not ready to make such a long journey," his sister said. "We will wait until spring when the traveling will be easier."

But the boy was an impatient child. The next morning he woke before dawn. He dressed himself in his thick coat, gathered his bow and arrows, and set off on his own.

After many hours he grew weary from his journey. He lay down beside a rock, wrapped his coat closely around him and fell fast asleep. While he slept, a heavy snow fell and covered the little boy's coat. At last the snowfall stopped .The Sun came out and cast its bright rays upon the boy, hoping to warm him.

When the boy woke, he tried to stretch. He could barely move. The melting snow had shrunk his coat so small that it no longer fit.
"Look what you've done!" the boy cried to the Sun. "You've ruined my coat, and now I cannot travel to the mountains. I must return to our cave for warmth. You are a cruel Sun. I will take my revenge on you!"

Back home, he could talk of nothing but his fury at the Sun. His sister tried to comfort him, promising that she would make him a new coat. She begged him to calm down. "Please, you must forgive the Sun. I am sure it was only trying to help you."
"The Sun does not deserve to shine," the boy said. "I am going to trap the Sun."

# Stories from the MAPS Region 

## Mouse and Sun: A Canadian Tale

His sister laughed, but soon she realized that her brother was quite serious about his plan.
"Give me several of your hairs," he told his sister. She gave him a dozen hairs from her head. "I will make a snare with these," he said, and set to work.

He left his sister and walked and walked until he came to the Great Water. There he placed his snare just above the water's surface, just at the place where the sun would rise out of the sea at dawn. He crept into a cave to wait.

At last the Sun came up, burning out of the sea. Up it rose, but when it met the snare, it became tangled in its weave. The Sun twisted and turned, but no matter how it tried, it could not free itself. The poor Sun was caught as surely as a fly in a spider's delicate web. The boy joyfully ran home to tell his sister of his success.

That day there was no light on Earth. The animals grew afraid. The birds flew to their nests. The beavers, moles and snakes buried themselves underground. The deer shivered and hid beneath the low-hanging branches. The owls hooted in mourning.

Many days of darkness and cold followed. The animals gathered to discuss what they could do. When they were quiet, Mouse spoke. In those days, Mouse was king of beasts, for he was huge. He was the largest of all Earth's animals.
"We must break the hairs that bind the Sun," Mouse said. "We will send Woodpecker to peck through them."

Woodpecker flew to the edge of the Great Sea. He pecked at the snare, but the hairs were stronger than any of the animals had imagined they would be. Soon Woodpecker's head was burned red from the heat of the Sun, but no matter how long and hard he tried, he could not break the snare. He flew back to the gathering of animals and told them they must find another way to free the Sun.

Now Mouse announced that he would free the Sun. "Yes," the animals agreed, "Mouse has the strength to break the snare.

Mouse set off for the Great Sea. Because he was so huge, it took him no time at all to reach the trapped Sun. He nibbled and gnawed at the hairs. The Sun's heat was intense and burned Mouse's fur and singed his whiskers. Still, he was determined to succeed. "Never fear, Sun," Mouse said, "I will free you."

The intense heat from the Sun's rays began to burn poor Mouse. Still he chewed. His own thin hair began to fray. But though the Sun's harsh heat was hurting him, Mouse would not give up. Mouse at last managed to chew through the last of the hairs. The Sun was free! Quickly the Sun rose into the sky, and a glorious light spread across the world.

The animals cheered and wept with joy at the sight of the Sun in the sky and at the touch of the Sun's warmth on their skin. Even the boy and girl in their cave could not help but be glad, for they too had grown saddened by the darkness.
"I was wrong," the boy confessed. "I was

## Stories from the MAPS Region

Mouse and Sun: A Canadian Tale

wrong to trap the Sun. Let's help the animals prepare a feast to welcome Mouse back home." The little boy and girl and all the animals prepared a welcoming feast to celebrate Mouse's return from the Great Sea.
"Look, Mouse is coming," Deer announced. Everyone looked up. Their mouths fell open in surprise at the sight. Mouse was no longer the largest animal in the world. Now
he was nearly the smallest. The Sun had shrunk him just as it had shrunk the little boy's coat, and the Sun had burned Mouse's back so that now he was the color of ash.

Ever since that time, Mouse has been one of the tiniest animals on Earth, and he has been ash-colored. And ever since that time, the Sun has been free to offer light to the world, even in the midst of deepest winter.


# Chiron III Hybrid brings majestic starry skies to two planetariums in Japan 

## Impressive realisim at the Toyama Science Museum



The Toyama City Science Museum selected the cutting-edge GOTO Chiron 111 Hybrid to supplement their digital planetarium, last updated in 2009. The planetarium's mission is to inspire fascination in the audience with the impressive realism of the images on the dome. The planetarium space is now open to the public with a much more realistic and beautiful starry sky to accompany the dynamic digital images.

Tadashi Hayashi, curator of the Toyama Prefectural Seience Muscum, said "CHIRONIII has made it possible to reproduce a beautiful starry sky that was difficult to visualize with a digital planetarium alone. We hope that many people will see it and deepen their interest in space. The dome theater provides a perfect place for enjoying detailed simulations. The museum has curators from various fields such as animals, plants, and insects, so I would like to use it as a place to explore multiple scientific topies in addition to astronomy."

In addition to the new equipment, the seating has been refreshed, including some new dual seats to increase visitor options. There is a large stage in front which can be used as a multi-purpose space or as a place to recline and be immersed in the stari.


4-16 Yazakicho, Fuchu-shi, Tokyo 183-8530 Japan E-Mail: info2@goto.co.jp Tel:+81-42-362-5312 URL: www.goto.co.jp/english/

## One billion stans at GDream 21", Osalka

"Dream 21", the Higashiosaka City Children's Culture and Sports Center, opened in 1991 as facility for children and has been loved by many citizens as a "children's plaza for science, culture, and sports". After
 30 years of operation, it reopened on April 1, 2023 with a new hybrid planetarium that combines the GOTO Chiron III optical projector with Digistar 7 and two Sony GTZ380 projectors.

The new GOTO CHIRON III star projector that was delivered to Dream 21 reproduces the Milky Way with 1 billion micro-stars, creating a more realistic, and beautiful, star filled sky. In addition, the Chironill has a unique dimming function that allows control over the brilliance of stars that change depending on the season or weather, as well as the stars that begin to shine at twilight; all can now be reproduced more accurately and naturally than ever before.

The original seats have been replaced with wider reclining seats, and the theater? s interior has been re-envisioned as a space where you can experience nature. A special sheet, designed to look like you are lying on the lawn, is also attracting attention and is a feature that children love?

## GOTO USA LIAISON

4044 N. LINCOLN, 204 CHICAGO, IL 60618
E-Mail: mark@goto-stars.com Tel:+1 317 537-2806
Contact : Mark Webb

## Committee Update: AWARDS

The MAPS Awards Committee was busy at the 2023 "Stars for All" National Planetarium Conference last month! Several MAPS members were nominated for special recognitions, and we are pleased to share our 2023 award recipients here.

MAPS Fellow Awards are presented to MAPS members who have maintained their membership for at least seven (7) consecutive years, while either holding an office, hosting a conference, or making a special contribution to the planetarium community. This year, MAPS recognized the following individuals as MAPS Fellows:

- Stephen Dubois
- Mike Francis
- Noreen Grice
- Mark Percy
- Carolyn Slivinski


The MAPS Exceptional Service Award is presented to a member who has gone "above or beyond the call of service" in work related to the planetarium field. From 2017-2023, April Whitt completed a 6-year term on the MAPS Executive Committee, progressing from President-Elect to President to Past-President. While this seems customary for such an elected official, April's presidency came at the height of the COVID-19 pandemic that shuttered so many planetariums throughout our region. For guiding our organization's emergence through such difficult times, we have proudly awarded April Whitt the MAPS Exceptional Service Award.

The MAPS Distinguished Service Award is the highest honor that our organization can bestow. This year, MAPS is proud to present its highest honor to Steve Russo. And since a special award deserves a special introduction, we asked Steve's longtime friend Sam Storch to invite him up to receive his award at the conference last month. Please see the following page to enjoy the introduction that Sam prepared and delivered for Steve.


# Committee Update: AWARDS 

## 2023 MAPS Distinguished Service Award Introduction

by Sam Storch

I had the honor of presenting an award at the Stars for All Conference that was held in Kingsport, Tennessee, on June 23rd, 2023. This was presented at the banquet on Friday afternoon for all to hear...

The Middle Atlantic Planetarium Society's highest honor, the Distinguished Service award, is the special recognition for outstanding long-term service and dedication to the Planetarium field on a local, regional, or national basis. Nominees should exhibit qualities of leadership, inspiration, vision, commitment to excellence, and a passion for the planetarium community. This year's recipient of the Distinguished Service Award has worked in and enjoyed presenting in large domes, in small planetariums, as well as in public planetariums, museums, and in educational settings. This person has successfully made the transition from optical-mechanical planetariums to the latest immersive experiences in digitally-powered dome theaters. This person has always been actively involved in the community where the planetarium is located, and has

enthusiastically participated in every way, adding to the knowledge base and to the communication within the field.

You are all wondering who this is? Well, picture this in your own mind... Brooklyn, New York...

A skinny little kid comes to me and asks if he can help out in the planetarium, I said, "No, they didn't build it yet. When it's built, you come." They built it. He came.

One morning, we were having a spaghetti party - and as all of you in the planetarium field know, this means there are wires everywhere. Wires on the floor. Wires coming out of the console. They're coming up from conduits underneath the floor. They're hanging down from the dome. Those wires were everywhere.

After a certain amount of time surrounded by wires and a soldering iron and test meters and everything else he says, "Why don't we go out and get some pizza for lunch?" "Okay." So we go.

## Committee Update: AWARDS

2023 MAPS Distinguished Service Award Introduction (continued)
by Sam Storch
Visualize again... Brooklyn, New York area. Inside this Pizzeria, there is a very large hairy sweaty man, wearing that sort of undershirt designed to expose the maximum amount of body hair.
"What do you want?" I said, "Two slices and a diet Coke."
"What do you want?" He says, "Two slices and a regular Coke."
"It will be cheaper if you get a small pie."
So I said, "Okay, small pie and two sodas."
A few minutes later... "Your pie is ready. You want to cut it in six or eight slices?"

The award recipient calls out, "You better cut it into six. I don't think we could eat eight." The award recipient is STEVE RUSSO.

I should mention that wherever Steve went there was always Steve's wife, Jan. She always participated and supported Steve and the planetariums in every way. When they first met, she made baby food jar projectors. Later on, she contributed artwork. This has always been a family affair, and although in my nervousness I forgot to mention Jan at the actual presentation, I'll mention it now so that I have a clear conscience.


Noreen Grice, Sam Storch, and Steve Russo. Following Sam's introduction, Noreen presented Steve with the MAPS Distinguished Service Award, the first time since 2018 that MAPS has chosen to bestow its highest honor upon a member.

For information on our MAPS Awards, nomination criteria, and past recipients, visit our website. To nominate a MAPS member for an award, please contact Kerri Kiker, Chair of the MAPS Awards Committee.

## Committee Update: MEMBERSHIP

Going to a convention seems to stimulate one to do things, and the Membership Committee is stimulated. We have expanded the membership committee from a committee-ofone (previously just our Treasurer, Mike Francis) to a fourperson committee, and we are looking to expand even more. Now on the roster with Mike are Noreen Grice, Tony Kilgore, and Cara Muscio. We are also planning on expanding further by adding one member from each state (more on that below).

We are also forming User Groups. For example, it can be difficult for portable planetarians to relate to their institutional brethren, so we are going to try having regular virtual meetings of the different types of planetarians. So far we have come up with the following groups:

- Mobile domes
- Museum and Nature Center Planetariums
- K-12 School Planetariums
- College and University Planetariums
- Unaffiliated Planetarium Educators
- Planetarium/Astronomy Education Consultants
- Telescope/Observatory Users

Plans are in the works to update and expand our database of member information. This will require everyone to fill out a new membership information form. Many MAPS members have not updated their information in recent years, so it seems like a good time. This is still a work-in-progress, so look out for more in the next edition of the Constellation.


MAPS Membership:

Active Members


Why are we looking to have a member from each state on the Membership Committee? The plan is to seek out every dome in every state of the region. As you can imagine, this is a monumental task that requires some local knowledge. The current Membership Committee contains representatives from MA, CT, NJ, and VA. If you'd like to be your state's MAPS rep, please drop me an email.

In the meantime, if you know of a dome near you or a planetarian who is not yet a member of MAPS, please send them to our website https://mapsplanetarium.org $\angle$ and encourage them to join.

# Committee Corners: Quick Updates 

AUDIT COMMITTEE<br>Chair: Paul Krupinski

Our annual election was held from January 1-31, 2023 for the offices of President-Elect, Secretary, and Treasurer. The candidates for the office of President-Elect were: Tim Collins, Anthony (Tony) Kilgore and Cara Muscio. Running for the office of Treasurer was Mike Francis, and for the position of Secretary was Amie Gallagher (both ran unopposed). The Audit Committee certified the results, with the following details:

- 55 electronic ballots were cast (this was $53 \%$ of the 103 eligible voters
- 3 ballots added after the election started
- 103 emails were sent
- 4 notices were returned as undeliverable

The winner for the office of MAPS PresidentElect was Tony Kilgore. Amie Gallagher and Mike Francis continue in their roles as secretary and treasurer, respectively, and we thank Tim Collins and Cara Muscio for running for the office of President-Elect.

## MEMORIAL COMMITTEE <br> Chair: Paul Krupinski

For decades, Owen Gingerich participated in the "planetarium advisory committee" for the Charles Hayden Planetarium at the Boston Museum of Science. Once or twice a year, the planetarium staff and the planetarium advisory committee met at the Museum. As I recall, the committee was made of members from the Harvard Center for Astrophysics, MIT, Boston University, Tufts, and Bentley College. We would discuss ideas for new shows and plans for the future of the planetarium. I always looked forward to those meetings and it always amazed me that we could contact them anytime when we needed assistance.

- Noreen Grice
https://skyandtelescope.org/astronomy= news/owen-jay-gingerich-1930-2023/

ELECTIONS COMMITTEE<br>Chair: Kevin Williams

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As announced in the Spring 2023 Constellation, elections were held in January 2023 with the following results:
- President-Elect: Tony Kilgore
- Secretary: Amie Gallagher
- Treasurer: Mike Francis
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Tony, Amie, and Mike began their two-year terms on June 1, 2023.

Our next election will be for the three Director positions. Nominations and "seconds" must be submitted to the Elections Committee in writing or electronically by November 1, 2023. MAPS members current on their membership dues may self-nominate or be nominated by a colleague. Even though the deadline for nominations is November 1, nominations are open now! If you have questions about the positions and/or want to nominate yourself or someone else, please contact the Elections Committee Chair at williakk@buffalostate.edu.

## CONSTITUTIONAL REVIEW COMMITTEE Chair: Mark Percy

Mark Percy has formed a Constitutional Review Committee consisting of himself, Jordan Ecker, and James Bauman. The committee has reviewed the current version of the MAPS Constitution and By-Laws. After discussion among the committee, a set of proposed revisions was prepared and shared with the MAPS Executive Committee.

The Constitutional Review Committee and the Executive Committee will be meeting later this summer to review and discuss the proposed revisions.

Once a final set of amendments has been created, MAPS members will be given a 30-day review period in advance of a membership vote to adopt the changes. Stay tuned!

## Committee Update: PUBLICATIONS

The MAPS Publications Committee wishes to take a moment to thank Kevin Conod for 30+ years of service as Editor of our Constellation. Over 100 issues of our quarterly newsletter have been made possible through his efforts.

Thank you, Kevin!
Moving forward, the MAPS Publications Committee currently consists of Brian Koehler as Chair, and three committee members - Mike Francis, Francine Jackson, and April Whitt. We are interested in additional members, so please contact us if you are interested in any of the following:

- Writing articles
- Reporting on activities and events in the MAPS region
- Reviewing and proofreading submitted content
- Graphic design

To the right, you will see a list of upcoming deadlines for future issues of the Constellation. In order to include a wealth of content from the "Stars for All" Conference in this issue, this issue has been published well after the summer solstice. We are working to return to having our quarterly newsletter aligned with the equinoxes and solstices, and plan to have that alignment restored by December of this year.

We accept content submissions yearround! We are always looking for articles, photos, and updates about YOUR planetarium! To submit content, or to join our Publications Committee, please contact the Chair at
publications@mapsplanetarium.org.

## Upcoming Deadlines for submitting content for the Constellation:

FALL 2023 Friday, September 22, 2023

## WINTER 2023

Friday, December 1, 2023
SPRING 2024
Friday, March 1, 2024
SUMMER 2024
Friday, June 7, 2024
FALL 2024
Friday, September 6, 2024
WINTER 2024
Friday, December 6, 2024

## Committee Update: PROGRAM

The MAPS Program Committee would like to acknowledge and thank Adam Thanz and his team at Bays Mountain Park and Planetarium for hosting the 2023 "Stars for All" National Planetarium Conference!

In consideration of two major astronomy and planetarium events next year (total solar eclipse in April 2024 and the IPS Conference in Germany in July 2024), and the time and cost of attending one or both, MAPS will be holding Armand Spitz Regional Meetings - 1-2 day gatherings rather than one major conference. We hope to have two or three locations and different meeting dates, so that MAPS
members might choose to attend one or more Regional Meetings.

At this time, we can announce that one Regional Meeting will take place in Mystic, CT, on September 12-13, 2024. We are seeking two additional hosts for Regional Meetings on different dates next year.

We will return to the "Full Conference" format in 2025. If you are interested in hosting a 2024 MAPS Regional Meeting, or proposing to host a 2025 MAPS Conference, please contact Tony Kilgore, Chair of the MAPS Program Committee, at KilgorAE@pwcs.edu.


## 2024 MAPS Regional Meeting



Brian Koehler and the team at the Treworgy Planetarium at Mystic Seaport Museum in Mystic, CT are honored to have been asked to serve as one of several hosts for MAPS Regional Meetings in 2024.

We would like to invite all MAPS members to "save the dates" of Thursday-Friday, September 12-13, 2024 for a two-day gathering at the nation's premier maritime history museum. Our 30-foot dome houses a Spitz A3P star projector, and we now have fulldome capabilities via a Warped Media spherical mirror projector. Conference room spaces at our museum offer picturesque views of the Mystic River. And who doesn't love New England in the fall? (yes, it does start to feel like fall up here by mid-September)

Our tentative plan is to begin the Regional Meeting around 12:00 noon on Thursday, September 12. We would gather together
through the afternoon and into the evening. And the meeting would adjourn between 3:00-4:00 PM on Friday,
September 13. We are mindful that travel considerations are different for members throughout our region, and we hope that this timing helps to accommodate as many members as possible.

As noted in the earlier Program Committee Update, MAPS is looking for 2-3 hosts for additional Regional Meetings, which would ideally occur at different dates to allow for members to attend one or more of the Regional Meetings in 2024. The staff in Mystic is excited to serve as hosts for September of next year, and we would also love to visit as guests to other gatherings!

More details about the CT gathering will be provided in future issues of the Constellation.

## Committee Update: WEBSITE

In recent months, we have begun to walk down the road of maintaining our website internally. Janet Stearns, who has been our external consultant and primary webmaster for many years, has left after many years of dedicated service. Tim Collins, Chair of the MAPS Website Committee, wishes to recognize and thank Janet for over 10 years of support and assistance. Janet, we are so grateful for your help in all of the modernization projects, and we were honored to have you on our team!

From this point on, the Website Committee will now control and operate the site. We have met with Janet to receive basic administrative training. Minor updates are being made to the individual pages as they are found, and some page posts will receive cosmetic changes. Content relevance and being up to date is the top
priority. More attention will be applied to detail. For example, post threads that contain aged posts should be softarchived, in other words, collapsed into a "More" section to reduce page scrolling.

There will be a slight learning curve after moving away from Janet's generous guidance and administrative experience. In the last 45 days, the committee has absorbed the challenge quite well.

MAPS Committee Chairs have been encouraged to review their sections of the website, and to provide content and information to the Website Committee to ensure timely updates.

We would be most happy to have more support from the membership! If you are interested in helping out on the Website Committee, please contact Tim Collins.

## Committee Update: HISTORY

The MAPS History and Archives Committee has recently made some moves to expand the committee from a committee-of-one (John Meader, MAPS Historian and Archivist) to what is currently 3 members with the welcome additions of longtime MAPS members and former officers, Sam Storch and Steve Russo.

The archival materials are currently housed at Northern Stars Planetarium in Fairfield, ME. The archive consists of 5 boxes of materials. Two boxes house folders for each year with copies of important documents from that year which may include: Constellation and Newsletter publications (not a complete set), conference notices, itineraries, and proceedings (not a complete set). The other
boxes contain photo albums, slides, and conference trinkets and bling.

Many of the Constellations have been digitized, as have a good portion of the documents. Much of this was done with the help of Alan Davenport and his crew at the Jordan Planetarium (University of Maine) several years ago, during Alan's tenure as MAPS President.

The new expanded MAPS History Committee has yet to meet as of this writing, but are planning on a Zoom soon. Committee Chair

John Meader is looking forward to proceeding with Steve and Sam to create a
more active committee, and he invites anyone interested in joining to contact a member of the History Committee.

## Committee Update: EDUCATION

The MAPS Education Committee, under the guidance of its Chair Lee Ann Hennig, has crafted a set of action items they are pursuing to better serve MAPS members. Their list of proposed steps includes:

- refining what content best serves the membership - tips? program notes? topics? archived articles from our newsletters?
- considering the best format(s) in which to present the content
- web resources - posting a list of useful websites, organized by educational topics (the committee recognizes that this list will have to be maintained over time)
- including a section on grant possibilities - both MAPS grants and external grants
- offering a list of scripts with video clips and images, compatible with various planetarium softwares
- making our own website "searchable" so members are able to find things more easily

The Education Committee also plans to solicit contributions from the membership, such as:

- a short article or lesson that one has developed or adapted
- describe a website or resource that one would recommend
- write a brief contribution based on one of our ongoing topics:
- "Questions That Lead to Lessons"
- "Stories in the Stars"
- an article about research that one has conducted

The MAPS Education Committee is a robust committee - with seven active members - but we are always looking to expand this invaluable resource for our members.

## Galleo <br> The Starry Messenger

A living history visit by the founder of modern astronomy.

As seen at:
The National Air and Space Museum The Franklin Institute Carnegie Science Center mike-francis.com/sm.htm


## DIIISTAR

THe [ipsi INSTAMLMENT OF LESSONS IN THㄴㄹ DICISTAR FULLDOME OURRIGULUM IS HERE!

The curriculum contains four volumes of astronomy lessons for a total of 8, hour long, classes and 60,20-30 minute, lessons serving a variety of grade levels. The lessons cover a wide gamut of subjects and gives educators a new library of slides, animations, and scene files to convey both straightforward and complex subjects in their own shows.


