



# CONSTELLATION

Winter 2022

## Nominations for the 2023 MAPS Election

For the office of President-Elect (in alphabetical order):

### Tim Collins

I am honored to again be nominated for President-Elect of the Middle Atlantic Planetarium Society. I have been your Web Committee Chair since 2010, and am currently considering a new position with the Buffalo Museum of Science, to continue contributions to the museum's Zygmunt Planetarium and Kellogg Observatory. I am also serving as a member of the Buffalo Eclipse Consortium in preparation for the 2024 eclipse, and also working closely with our local amateur astronomy group, the Buffalo Astronomical Association where I have been serving as a panelist for our Looking Up! Facebook events since 2020.



I first began my work the planetarium as a college freshman in 1987 at the Whitworth Ferguson Planetarium at Buffalo State. In that 35 years, I have also served as a Community Education Instructor for the Williamsville Space Lab Planetarium as well as lent my voice to my community through our local media. I attended my first MAPS conference 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. I left the organization during my graduate years, but returned in 2010 missing the MAPS and IPS community I loved so much.

If chosen as President-Elect, I would bring my enthusiasm and love of astronomy education to the already incredible Executive Board we have had for so long. I aspire to learn and grow, and never plan to stop. Learning is something we should all do continuously, and teaching is what we do when we love what we have learned so much that we become passionate about sharing it with others.

Additionally, I had the pleasure of attending a GLPA conference hosted in our city of Buffalo this past October. While there, I saw something that as President I would like to try to help bring to MAPS: a very strong youth movement. GLPA has a high concentration of young professionals who have the same passion we all had in our younger years, and it is my intention to foster that into our regional membership, and contacting as many of the institutions in our region as possible that have left or do not know of us. In order to continue our success, we must also have succession. I will make it my primary focus to continue the interest of our youth to ensure another generation of our organization, while maintaining the path carved out by those before me, and to those after. We have done so much already that I know whomever you decide to elect, we will grow stronger together.

Thank you very much for your time.



### Cara Muscio

Hi, I'm Cara Muscio, the Associate Director at the Robert J. Novins Planetarium.

I had my first Planetarium experience as a shy 6-year-old. All I remember is a booming voice in the dark, and when they introduced Pluto, a picture of the Disney cartoon dog appeared. This tiny, memorable moment laid the groundwork for my philosophy of science education – meet folks where they are, and connect through our shared stories.

Twenty-five years later, I have co-created a Nationally award-winning grassroots shellfish restoration program, been the college professor helping students find won-

*(Continued on page 3)*

## MAPS Executive Committee

### Officers

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Lanham, MD

## CONSTELLATION

*The Constellation is the newsletter of the Middle Atlantic Planetarium Society (MAPS). It is published four times a year near the equinoxes and solstices. For more information about MAPS, see: [mapsplanetarium.org](http://mapsplanetarium.org).*

*To submit an article or ad contact the Editor, Kevin Conod, at [kdconod@yahoo.com](mailto:kdconod@yahoo.com)*



## MAPS Membership

Thanksgiving is behind us, the Winter Solstice has arrived, and holiday planetarium shows are just ahead. And of course who can forget it's time to renew your membership for the Middle Atlantic Planetarium Society. What do you get with your membership?

- Annual subscription to The Constellation, our quarterly newsletter, in print or on-line.
- An invitation to attend the annual MAPS Conference.
- Access to Members-Only Content on the MAPS website.
- Access to MAPS-L, our on-line bulletin board service.
- Teacher mentoring, advice and help available through the MAPS Mentoring Program.
- Voting privileges to vote for colleagues who will serve as your representatives on the MAPS Board.
- Transcript of the proceedings of the annual conference.
- Complementary or reduced rate publications of interest to planetarians.
- Support and membership in a community of professionals that are dedicated to astronomy and science education.

In order to qualify for the status of Life Member in MAPS, a member must have a minimum of seven consecutive years working within the region of the Middle Atlantic Planetarium Society.

With all those benefits, how can you possibly wait?!  
Here's the link: [Renew MAPS Now \(https://bit.ly/MAPS Renew\)](https://bit.ly/MAPS Renew)



Or to purchase by mail, send an email to Mike Francis, [mfrancis@mike-francis.com](mailto:mfrancis@mike-francis.com).

Know someone who isn't a member and should be?  
Please forward this information to them!

# Nominations for the 2023 MAPS Election

*(Continued from page 1)*

der in the natural world, and helped the Novins Planetarium reestablish itself as an engaging, trusted partner in our community.

I have charted a winding course that spans the perspectives of the microscopic to the infinite, and from environmental field research to informal space education. My background in earth and environmental sciences, my path as a yoga instructor and meditation teacher, and my interest in music, audiovisual technology, and performance have all converged in a career I can't imagine loving more.

I am honored to have been nominated for the position of President-Elect, and am excited for the opportunity to bring my unique perspective and skills to the Executive Board and the membership of MAPS. I look forward to helping us all improve science literacy in our communities, work more collaboratively and draw on each other's experience, and stay relevant and successful in our changing world. Most importantly I hope to help all of us and those we serve to Keep Lookin' up!

## **Anthony (Tony) Kilgore**

Hello! My name is Tony Kilgore, Director of the Irene V. Hylton Planetarium in Woodbridge Virginia, and I am honored to be nominated for the office of President-Elect of the Middle Atlantic Planetarium Society - MAPS.



A little bit about me, I first fell in love with planetariums as a high school senior taking astronomy at Boardman High School in Boardman, Ohio. Mr. Dan Hicklin would amaze us with his out of this world sky talks and demonstrations using an old Spitz A3P. I was able to continue my love of astronomy at Youngstown State University seeing the night sky through Professor Young's eyes at the Ward Beecher Planetarium. Upon graduation, I moved to Northern Virginia to begin my career as a high school Astronomy/Earth science teacher. In the summer of 2008, I was approached by the Supervisor of Science for the Prince William County Public Schools and asked to interview for the position of Planetarium Director. I guess you could say the rest is history because I have been holding that position for the past 15 years. Throughout my tenure as Director, I have obtained grants and have seen the planetarium through a \$250,000 projection system renovation and just recently a \$2,000,000 complete facility renovation. The Irene V. Hylton Planetarium is near and dear to my heart as I have made countless friends and connections throughout my service. I even met my wife at the Hylton Planetarium when she brought her second-grade class to visit me for a field trip.

Continuing to build my professional knowledge base, I attended my first MAPS conference in the spring of 2009 at the H.B. Owens Science Center and I've been hooked ever since. If elected as your MAPS President-Elect, I will spend the first two years of my term learning all of the required duties and responsibilities of the president to ensure I am well prepared for the next phase of office. I will work in conjunction with the current MAPS president, Officers, Board, and members to create a member directory and more accessible website experience to help connect the planetarium directors, vendors and patrons of the Mid Atlantic to one another. I truly believe the answer is in the room and if we can get these bright and innovative minds together (virtually, in person, and in between) we can build a better planetarium experience across all our facilities.

*(Continued on page 5)*

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**For the office of Secretary:**

**Amie Gallagher**

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 facilities.

After college, I got a part-time job at the Newark Museum’s planetarium. Part of the job included taking out Starlab to do shows. That was a great way to learn all the highways not right next to my house! From Newark, I got an internship at the Hayden Planetarium, which turned into eight years of education and production work, teaching thousands of visitors each week about the sky. While the Hayden was undergoing renovations, I spent my “free” time getting a Masters in Elementary Education. I left the Hayden and taught 5th grade in New Jersey for a year. I soon realized that my true passion was informal education, not being in a classroom every day. I was lucky enough to have a job come available at Raritan Valley Community College Planetarium just then.

I’ve been at RVCC for the past 19 years. I’ve coordinated Project ASTRO and Family ASTRO, led MANY teacher workshops through the years, and am now Director of the Planetarium. I’ve been a member of MAPS since 1993, and Secretary of our organization for the past six years. I was excited to become a

*(Continued on page 6)*



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MAPS Fellow in 2016. I enjoy attending MAPS conferences to meet up with friends and colleagues. I always walk away from these gatherings with new information and ideas that I can incorporate into my planetarium immediately. Being part of the Executive Committee has allowed me to be part of the inner workings of MAPS. I love being able to help bring us forward as an organization.

Our global society is trying to find a new sense of balance. Our professional field is taking the opportunity to rethink our means of presentations. Temporary closures of our buildings forced us to become creative in how we continued to reach our audiences. Now that most of us have fully reopened, are we back to business as usual or do we incorporate some of the lessons we've learned over the past few years? I found that the virtual environments we shifted to expanded our professional and educational horizons. 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.

**For the office of Treasurer:**

**Mike Francis**

I'm Mike Francis and I've been bringing Astronomy to organizations nationally for over 45 years. After ten years at the Charles Hayden Planetarium, I started my own program with Mike Francis Stars Science Theater. Combining science and theatre, I introduce audiences to the wonders of our Universe. Appearances include the Space Telescope Science Institute and the National Air and Space Museum. I'm a professional actor and a member of the International Planetarium Society, the Mid Atlantic Planetarium Society and SoloTogether. I'm currently serving as your treasurer and would like your support for another term.



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# IPS News – Susan Button

## IPS Portable Planetarium Committee Report September 2022



In October, our committee was asked to present the IPS Board with our annual report. After querying the portable planetarium representatives in each of the twenty five IPS affiliates and committee members, remarks received were used to create this report.

**Current Activities:** Several times a year questions are received about what systems are out there. Many times it is sufficient to point to the website; the website contains lots of useful information. Sometimes questions asked result in our recommendations to connect with specific mobile dome directors across continents. We periodically add information and updates to our committee page.

### **Future projects:**

- **IPS Portable Planetarium Committee webpage:** Currently, good basic information is available on our web pages; especially popular is the Portable Planetarium Handbook. We continue to work on updating the Handbook and would like to translate it (or sections of it) into other languages. We need to focus on using the webpage to keep mobile dome operators in permanent contact with each other. To that end, we would like to initiate a conversation platform. We are also collecting information about different activities in portable planetariums - such as special music and light shows, concerts etc. to be included on our committee page.
- **Conferences:** We feel that we need to have our own conferences, where we can keep sharing our latest news, practices, and resources. (Probably E-conferences at this time.)
- **Fulldome:** We are approaching vendors to have special pricing for fulldome shows for portable domes. We want to build consortiums for mobile and small domes as a way to increase buying power; at least one vendor is amenable to that idea.
- **Centennial:** We are gathering information about the history of mobile domes. We encourage participation of mobile domes in the centennial and want to publicize portable planetarium centennial celebration events. Additionally we need to gather data of inflatable domes from each country in a spreadsheet with pictures alongside, to be included in the Worldwide Planetarium Database.

*If you would like to volunteer, initiate, or facilitate any of these projects or if you have other suggestions, please contact me as soon as possible. [sbuttonq2c@gmail.com](mailto:sbuttonq2c@gmail.com)*

### **IPS international Projects**

One of our mobile dome colleagues is in Germany as I write this and sending Facebook messages daily about all the marvelous adventures he is having! Marco Avalos Dittel, Planetario Aventura, is the latest winner in the “**Week with the GDP**” contest and is finally able to travel now that Covid has calmed down a bit! Marco is director of the only mobile dome in all of Costa Rica! He is a fantastically talented planetarian with much to share and he will also learn a lot from our German colleagues.

*(Continued on page 8)*

Applicants for the “**Week in the US**” will be coming soon; the deadline each year is Dec. 31. The 2023 two generous hosts for the winners will be Maynard F. Jordan Planetarium in Orno, Maine with Director: Shawn Laatsch and Bays Mountain Planetarium in Kingsport, Tennessee with Director: Adam Thanz. Contact me if you would like to be considered as a host for 2024. Susan Button at [sbuttonq2c@gmail.com](mailto:sbuttonq2c@gmail.com)

We have two fantastic winners in line for the “**Week in Italy.**” Andy Kreyche, Planetarium Educator at Hartnell College in California will be working with Italian colleagues for 10 days at 4 different locations. Ken Brandt, Director at Robeson Planetarium and Science Center in North Carolina is looking forward to the same adventure in 2024.

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## IPS Centennial Celebration 2023 - 2025

The sky was brought down to earth in October 1923 when the first planetarium projector was unveiled in Jena, Germany. The first planetarium opened to the public on May 7, 1925, when the Deutsches Museum opened in Munich. Today, planetariums reveal the secrets of the universe –

they are a gateway to space; they inform and inspire by creating audiovisual worlds of experience. Since 1923, planetariums have evolved. The entire universe can now be represented realistically, allowing everyone to experience distant worlds and the wonders of the cosmos as if they themselves had their very own spacecraft. In addition to vivid representations of scientific content, live concerts, laser shows and other cultural events fascinate visitors. Every visit to a planetarium stimulates the imagination like no other venue can.

Planetarians can spread the word about this celebration far and wide! This is our chance to “blow our own horns” and join this worldwide celebration. We can boost the prestige of **all** planetariums by demonstrating our participation in this amazing celebration. **The Centennial of the Planetarium** celebration that will start in just a year, on 21 October 2023.

*What can we do?*

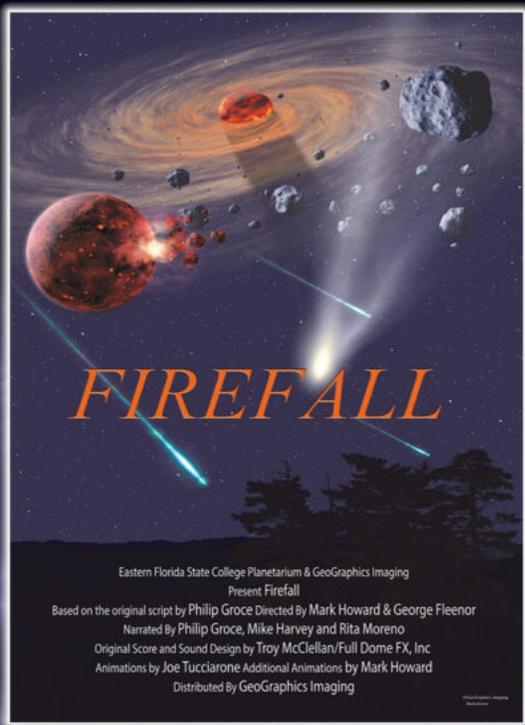
- Get familiar with this webpage and check it frequently for updates: <https://planetarium100.org/>  
Download the fulldome trailer and show it in your dome!
- Check out the following Centennial projects:

### Contest for the Best Local Projects

Coordinator: Guilherme Marranghello

The Planetarium Centennial celebration must be a global celebration. Thus we encourage every Planetarian: Hold your own event in celebration of the Centennial! This could be a Centennial-themed celebration of the anniversary of your own planetarium; a Centennial-themed concert or other cultural event, or an activity or presentation of your planetarium to be offered on the annual day of planetariums, May 7th – just to name a few examples. Certainly there are could be many more ideas, depending on your region and municipality! To help realize the best ideas for activi-

*(Continued on page 10)*



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# Planetarium Centennial Celebration

*(Continued from page 8)*

ties, exhibitions, shows, inclusive materials and much more during the centennial celebration, from 2023 to 2025, IPS will be offering grants of up to \$1,000. Overall, IPS will fund a total of \$15,000 for these projects.

Go to: <https://planetarium100.org/centennial-projects/local-projects/> and enter your project idea for a chance to win a \$1,000 grant towards your local project celebrating the Centennial of the Planetarium!



## **Art & Design Contest**

Coordinator: Volkmar Schorcht

To celebrate the Centennial, we aim to encourage the creation of digital artwork revolving around the Centennial theme. Submit your poster designs that interpret the planetarium Centennial from an artist's perspective. The submitted contributions, or a "best of," will then be made available to planetariums worldwide. The best poster submissions will be chosen by an IPS jury in 2023, and will be presented during the Centennial opening ceremony. The three best submissions will be awarded a prize sponsored by IPS.

Go to : <https://planetarium100.org/centennial-projects/design-contest/call-for-entries-enter-our-artdesign-contest-now/>

## **Fulldome Shorts Contest**

Coordinator: Volkmar Schorcht

The fulldome format allows the creation of unique immersive video artworks. What would be more fitting to celebrate the Centennial than such artistic fulldome video shorts? Thus we encourage fulldome creators, video artists, and the whole planetarium community, to get creative, and develop a short fulldome clip that relates to the Centennial theme.

The best submissions will be chosen by an IPS jury, and will be featured during the opening ceremony in October 2023. Subsequently, the fulldome clips will be made available to planetariums worldwide, to help promote the Centennial throughout the world. The best three submissions will be awarded a prize sponsored by IPS.



## Saying 'Farewell' to NASA's InSight Mars Lander

On Dec. 18, 2022, NASA's InSight Mars Lander did not respond to communications from Earth. As expected, the lander's power has been declining for months, and it's assumed InSight may have reached its end of operations. NASA will declare the mission over when InSight misses two consecutive communication sessions with the spacecraft orbiting Mars, part of the Mars Relay Network – but only if the cause of the missed communication is the lander itself. After that, NASA's Deep Space Network will listen for a time, just in case.

Learn more about InSight, the first mission to explore Mars' deep interior: <https://bit.ly/3BOFNWv>

*Credit: NASA/JPL-Caltech*

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Image Credit: Creative Planet

## Free Content for the Dome

by Susan Button

Here are three sources of free content, I learned about at the IMERSA Summit in Montreal and the GLPA Conference in Buffalo this year:

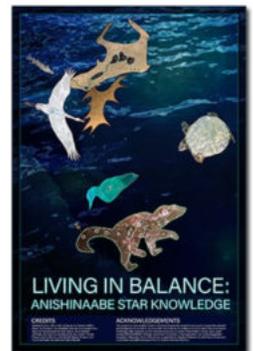
- **The One Sky Project**

Each short film represents the perspective of a different culture or Indigenous society from around the globe. Each film stands alone as a short story or in combination as a longer narrative – organized around themes of “Finding Patterns” and developing tools, or as we say, “To Seek Far.” See:

<https://www.oneskyproject.org/page/planetarium-film-shorts>

- **Living in Balance** - Shannon Schmoll

The Abrams Planetarium collaborated with Dr. Beth LaPensée to create a planetarium show on Anishinaabe Star Knowledge. The script and art was created by Dr. LaPensée and the show heavily features the Eastern dialect of Anishinaabemowin. It was narrated, reviewed, and approved by Anishinaabe elders and community members including Alphonse Pitawanakwat, Aarin Dokum, and Dr. Annette Lee. Abrams translated the assets into a show using Gimp and Digistar 6 programming. We took the information from Dr. LaPensée to develop an educator guide that accompanies the show. We are distributing it for free or low cost for anyone who is interested.” (If you need frames mailed to you on a drive there may be a small fee for processing that.) To preview or acquire the “Living in Balance” program contact Shannon Schmoll at [schmolls@msu.edu](mailto:schmolls@msu.edu).



- **Free Fulldome Assets From Creative Planet** - Maciej Ligowski

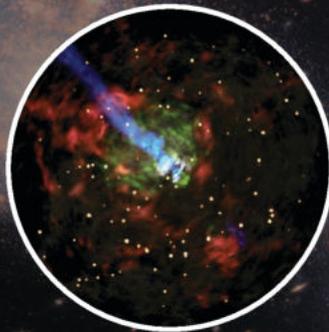
We’ve created a pack of free fulldome assets that feature a rich set of panoramas based on our newest film called Magic Globe. The panoramas are mutually consistent and complete, so your whole story can be based on them. These visually appealing materials were designed under the watchful eye of Maciej Rasala, our award-winning fulldome Art Director. The asset pack is available, free of charge, here:

<https://creativeplanet.pl/en/free-fulldome-assets-from-creative-planet-to-enrich-your-planetariums-live-shows/>

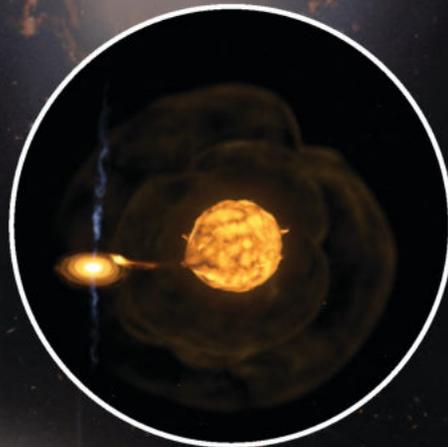
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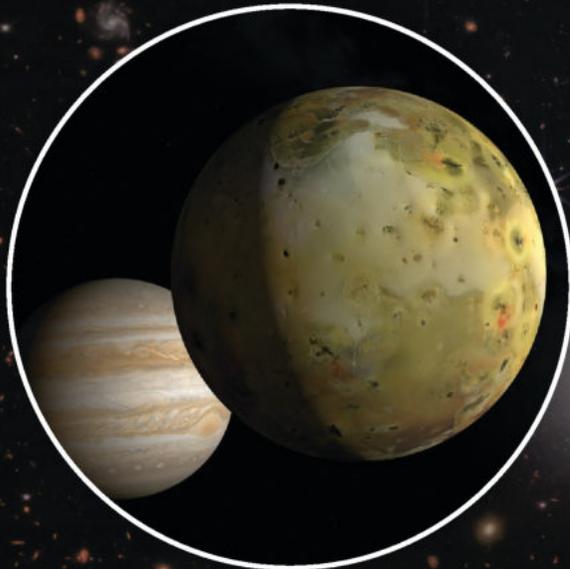
The curriculum contains four volumes of astronomy lessons for a total of 8, hour long, classes and 60, 20-30 minute, lessons serving a variety of grade levels. The lessons cover a wide gamut of subjects and gives educators a new library of slides, animations, and scene files to convey both straightforward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



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# PLANETARIUM NEWS

## Springfield's Historic Korkosz Star Projector: Into the Next 85 Years! Kevin Kopchynski

### Intro

*In 1937 Springfield, Massachusetts, was able to have a "theater of the heavens" thanks to the ingenuity of Frank and John Korkosz. At a time when only the four largest cities were able to purchase Zeiss' newly-invented planetarium projector, they figured out how to build a projector that allowed the Springfield Science Museum to provide a similar experience for its citizens. Their brother Stanley also helped with some of the images that they used when it opened.*

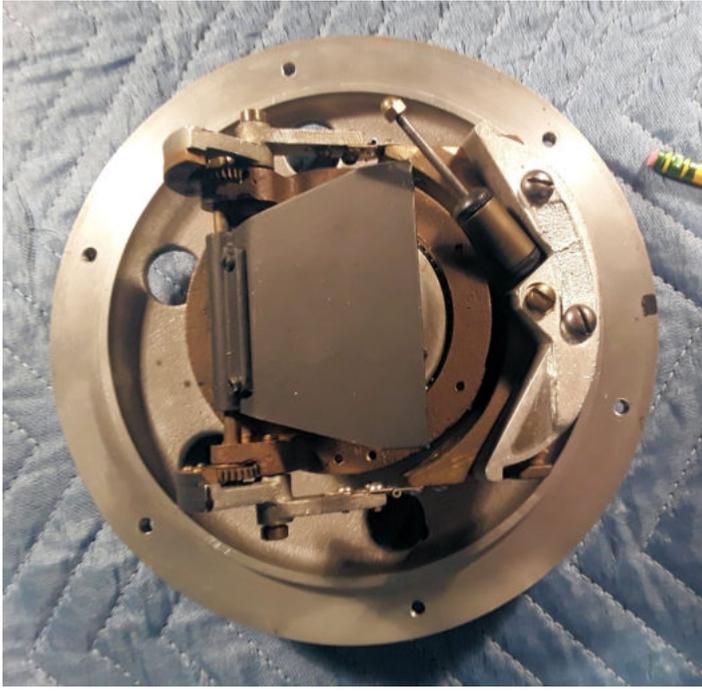


We recently gave the Seymour Planetarium at the Springfield Science Museum a re-design, removing all the 35mm slide equipment and the covers that supported them, bringing the walls back out to the original size. Theater-style seats with a 1930s look replaced the old plastic bucket seats. A local welder was able to take some old railing we provided and create an enclosure for the projector in the middle of the room, so that it was protected but people could enjoy its steampunk look.



The Korkosz projector itself got its share of attention. We went in and replaced some drive belts, thanks to a local lawn mower repair shop for advice on that! We also examined and corrected some quirks in the star displays. There are over 40 projection units on the ball, each equipped with several lenses, a shutter mechanism so that the stars wink off at the horizon line, and a metal plate punched with holes to shine the stars onto the dome. Frank punched over 7,000 holes in those metal plates using different sizes to give the appearance of the varying brightness of the stars.

(Continued on page 16)



Working with those projection units was at once awe-inspiring and perplexing. The meticulous care and precision that went into each plate was amazing. They had sketches on them! The shutter mechanisms worked smoothly, as if they were 85 days old, not 85 years. Everything fit together perfectly. Yet, if the Korkoszs left any descriptions of how the devices were designed to work, we have not found them yet. That would be the closest thing to a factory manual that would exist for this machine. And worse yet, there are NO YouTube videos! So we are left to puzzle out why a few stars are not as bright as they should be, and after some investigation we have some good working hypotheses.

There is one last item to consider, which is the bulb. The starball is illuminated by a 500 watt light-bulb that is about the size of a grapefruit. Luckily, someone had the foresight to buy a few cases of these, because they do not seem to be in production anymore. We have about a 10-year supply remaining. We have a volunteer electrical engineer looking to design a way to use a bright LED bulb to replace them.

The most exciting renovation will come in the spring of 2023. At that time, Zeiss will finally come to Springfield. We were able to purchase a system using their Velvet projectors, which project a truly dark background. With this technology, we will be able to use our historic projector with its aesthetic optical starfield along with full dome video to bring the best of 21st century effects. It is a perfect upgrade for the next 85 years of the Korkosz star projector.



*The historic Horn Antenna located in Holmdel, NJ was used by Arno Penzias and Robert Wilson used to first detect cosmic microwave background radiation from the Big Bang. The discovery earned the scientists the Nobel Prize in 1978.*

## **Redevelopment plans could threaten historic radio telescope**

The property that hosts the historic Horn Antenna in Holmdel, NJ was sold last year to a private developer who is planning a housing project. Once part of Bell Labs, and the site of Penzias and Wilson's Nobel prize winning discovery of cosmic background radiation, the site is a 42 acre wooded area that locals want to preserve as open space. Advocates have started a petition to ask the town council to create a park and preserve the telescope. For details see: [bit.ly/3v4JCU1](https://bit.ly/3v4JCU1)

For more information, see Sky & Telescope's article on the situation: [bit.ly/3HTJX3x](https://bit.ly/3HTJX3x)

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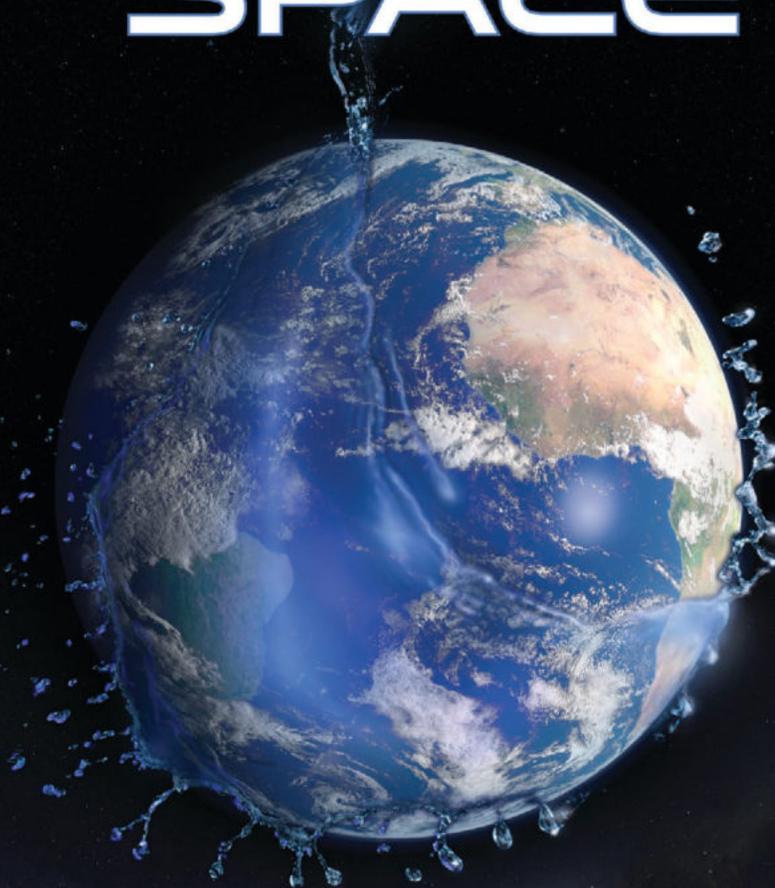
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