

# Middle Atlantic Planetarium Society 2016 Conference

*Innovate, Imagine, Inspire – Taking a New Approach*  
July 27 – 30, 2016

James E. Richmond Science Center  
Waldorf, MD



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**A very special THANK YOU to our 2016 Conference Hosts!!**

The James E. Richmond Science Center

*Monique Wilson, Director*

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## WEDNESDAY JULY 27, 2016

1:00 pm	Exhibit Hall Open for Set-up	<i>Vendor Hall</i>
5:00 pm	Registration Begins	<i>Lobby Area</i>
5:30 – 6:30 pm	Opening Reception <b>Sponsored by <i>Evans &amp; Sutherland</i></b>	<i>Lobby Area</i>
6:30 – 7:00 pm	Welcome Remarks	<i>Planetarium</i>
7:00 – 7:30 pm	Asteroid: Mission Extreme <i>Presented by Sky-Skan &amp; National Geographic</i>	<i>Planetarium</i>
7:30 – 8:00 pm	Solar Superstorms <i>Presented by Spitz, Inc.</i>	<i>Planetarium</i>
8:00 – 8:30 pm	Trivia Game!	<i>Planetarium</i>

## NOTES

## THURSDAY JULY 28, 2016

7:30 – 8:15 am	Breakfast and Registration <b>Sponsored by Sky-Skan and Prismatic Magic Laser Programs</b>	<i>Dining Area</i>
8:15 – 8:30 am	Welcome Remarks from Charles County Public Schools	<i>Planetarium</i>
8:30 – 9:35 am	<i>Delegate Talks in the Planetarium</i>	
8:30 – 8:45	It Takes More Than Just Telescopes to Host a Successful Lunar Eclipse Viewing: Especially in the New York City Metro Area <i>Patrick McQuillan, Liberty Science Center</i>	
8:45 – 9:00	Preview of Evening Planets, August 2016 through September 2017 <i>Robert C. Victor, Abrams Planetarium, MSU</i>	
9:00 – 9:15	Droning On in the New 360° World <i>Tim Collins, Whitworth Ferguson Planetarium</i>	
9:15 – 9:30	More History in Rhode Island <i>Francine Jackson, URI Planetarium</i>	
9:30 – 9:35	Planetarium Pre-Visualization with an Oculus Rift <i>Frank Summers, Space Telescope Science Institute</i>	
9:45 – 10:15 am	Seeing Our World as Only NASA Can! <i>Maurice Henderson, SOS Project Engineer</i>	<i>Science On a Sphere</i>
10:15 – 10:30 am	Morning Break <b>Sponsored by Ash Enterprises and ChromaCove</b>	<i>Dining Area</i>
10:30 am – noon	Workshop Block #1 <i>Let's Play: Interactive Gaming in the Planetarium</i> OR <i>SOFIA: NASA's Airbourne Astronomy Ambassadors and Music Scoring Workshop</i>	
12:00 – 1:30 pm	Lunch & Lunchtime Presentation <i>Solar Probe Plus Mission</i> Dr. Nicola Fox, Johns Hopkins Applied Physics Laboratory <b>Sponsored by Space Foundation</b>	<i>Dining Area</i>
1:30 – 1:45 pm	Space Foundation Video	<i>Planetarium</i>

1:45 – 2:30 pm	<i>Vendor 10-minute Talks in the Planetarium</i>	
1:45 – 1:55	ChromaCove	
1:55 – 2:05	GOTO	
2:05 – 2:15	Museum of Science, Boston	
2:15 – 2:25	Magna-Tec Electronic Company & Konica Minolta Planetarium Co., LTD	
2:30 – 2:45 pm	Seiler/Zeiss 15-minute talk	<i>Planetarium</i>
2:45 – 3:00 pm	Prismatic Magic Presentation	<i>Planetarium</i>
3:00 – 4:00 pm	Afternoon Break with Vendors <b>Sponsored by GOTO and RSA Cosmos</b>	<i>Vendor Hall</i>
4:00 – 4:15 pm	IPS Updates and Vision 2020 – Where IPS hopes to go in future and how you can take part <i>Shawn Laatsch, Emera Astronomy Center, U. of Maine</i>	<i>Planetarium</i>
4:15 – 4:45 pm	<i>Vendor 15-minute Presentations in the Planetarium</i>	
4:15 – 4:30	Sciss	
4:30 – 4:45	Ash Enterprises	
4:45 – 5:15 pm	Spitz Inc. Presentation	<i>Planetarium</i>
5:15 – 5:45 pm	Moons: Worlds of Mystery <i>Presented by Museum of Science, Boston</i>	<i>Planetarium</i>
5:45 – 6:00 pm	Travel to Blue Crabs Stadium	
6:00 – 7:00 pm	Dinner at the Southern Maryland Blue Crabs Stadium <b>Sponsored by Spitz</b>	
7:00 – 7:15 pm	Travel to the James E. Richmond Science Center	
7:15 – 7:30 pm	Group Photo in the Planetarium	
7:30 – 8:00 pm	Accidental Astronauts <i>Presented by Clark Planetarium</i>	<i>Planetarium</i>
8:00 – 8:45 pm	You're Not Ready for This Eclipse – Are You? Workshop by Ken Miller	<i>Auditorium</i>

## FRIDAY JULY 29, 2016

7:30 – 8:15 am	Breakfast and Committee Meetings <b>Sponsored by Ash Enterprises and RSA Cosmos</b>	<i>Dining Area</i>
8:15 – 8:45 am	Poster Session <i>Posters will remain up through 1:00 pm</i>	<i>Lobby Area</i>
8:45 – 9:30 am	<i>Vendor 15-minute Presentations in the Planetarium</i>	
8:45 – 9:00	RSA Cosmos	
9:00 – 9:15	Seiler/Zeiss	
9:15 – 9:30	Sky-Skan	
9:30 – 10:00 am	Evans & Sutherland Presentation	<i>Planetarium</i>
10:00 – 11:00 am	Morning Break with Vendors <b>Sponsored by Museum of Science, Boston and Prismatic Magic Laser Programs</b>	<i>Vendor Hall</i>
11:00 – 11:30 am	To Worlds Beyond <i>Presented by Donetsk Planetarium</i>	<i>Planetarium</i>
11:30 am – noon	<i>Delegate Talks in the Planetarium</i>	
11:30 – 11:45	Move the Pointer Slowly <i>Alan Davenport, Maynard F. Jordan Planetarium, Retired</i>	
11:45 – 12:00	Introducing the Next Generation Science Standards in Your Planetarium: 3-Dimensional Learning Should be Easy in Space <i>Patrick McQuillan, Liberty Science Center</i>	
12:00 – 12:30 pm	Meditation in the Dome <i>Amie Gallagher, Raritan Valley Community College</i>	<i>Planetarium</i>
12:30 – 1:00 pm	Lunch <b>Sponsored by Seiler/Zeiss</b>	<i>Dining Area</i>



1:00 – 2:00 pm      Lunchtime Presentation      *Planetarium*  
*New Horizons One Year After Pluto*  
Becca Sepan, Johns Hopkins Applied Physics Laboratory

After 9.5 years in flight, the New Horizons mission completed the first reconnaissance of the Pluto system with closest approach to Pluto on July 14, 2015. The wait was well worth it: Pluto is a beautiful, fascinating world that is much more dynamic than we expected. Data collected during encounter is still being sent back to Earth and NASA just recently approved a mission extension including a close encounter with a Kuiper Belt Object that was just discovered in 2014 so there is still much to come for New Horizons.

2:00 – 3:30 pm      2017 Eclipse Workshop      *Auditorium*  
*Charles Fulco, Port Chester Middle School*

3:30 – 3:45 pm      Afternoon Break      *Dining Area*  
**Sponsored by *Magna-Tec Electronic Company & Konica Minolta Planetarium Co. and Sciss***

3:45 – 4:45 pm      MAPS Business Meeting      *Auditorium*

4:45 – 5:45 pm      *Free time*

5:45 – 11:00 pm      The Margaret Noble Banquet      *Hilton Garden Inn*  
**Sponsored by *Evans & Sutherland and Spitz***

5:45 – 6:45      Cocktail Hour

7:00 – 8:00      Dinner

8:00 – 8:20      Presentation of Awards

8:30 – 8:35      Introduction of Steve Russo by Sam Storch

8:35 – 9:30      *Margaret Noble Address*  
Steve Russo

9:30 – 11:00      Social Time

*Music provided by the Southern Maryland Jazz Band*

## SATURDAY JULY 30, 2016

- 7:30 – 8:15 am      Breakfast *Dining Area*  
**Sponsored by Sciss and the Space Foundation**
- 8:15 – 10:30 am      Workshop Block #2  
*Flip Your Dome!;*  
*Legacy of the Film Industry;* and  
*UV Bottle Ideashare*
- OR
- UV Bottle Ideashare;* and  
*EcoDetectives: Engineering Design Process in the Planetarium*
- 10:30 – 10:45 am      Morning Break *Dining Area*  
**Sponsored by Seiler/Zeiss and Sky-Skan**
- 10:45 – 11:00 am      Buffer time
- 11:00 am – noon      *NASA to Mars, Nonstop via Your Planetarium*  
Elsie Weigel, Public Engagement/Space Act Agreements, NASA
- 12:00 – 12:30 pm      Closing Remarks & Door prizes

## INVITED SPEAKER INFORMATION

### Thursday Lunchtime Presentation

#### **Dr. Nicola “Nicky” Fox**

Nicky joined APL in 1998 as a research scientist where she studied various aspects of the geospace impact of coronal mass ejection events from the Sun. Since 2015, she has served as the Chief Scientist for Space Weather in the Space Research Branch. She has extensive project and program science leadership experience and is project scientist for the Solar Probe Plus mission as well as Deputy Project Scientist for the Van Allen Probes mission working the NASA Center and NASA Headquarters on the full range of science issues for these high profile missions. Prior to joining APL, Nicky was a USA National Research Council fellow at NASA Goddard Space Flight Center, and a research scientist at Raytheon, with special responsibilities for the operations of the NASA Polar spacecraft and the International Solar Terrestrial Physics Program. She earned a Ph.D. in physics from the Imperial College of Science, a master’s of science degree in telematics from the University of Surrey, and a bachelor’s degree in physics from the Imperial College of Science.

### Friday Lunchtime Presentation

#### **Becca Sepan**

Mission Operations, Johns Hopkins University Applied Physics Laboratory

Becca Horne Sepan is originally from a suburb of Philadelphia and now resides in Columbia, Maryland. She graduated from the University of Virginia with a Bachelor of Science degree in aerospace engineering and from the University of Maryland with a Masters of Engineering in the same field. Currently Becca works at the Johns Hopkins Applied Physics Laboratory in spacecraft mission operations for the New Horizons mission to Pluto and the Kuiper Belt and the MESSENGER mission to Mercury. She started her career at the NASA Goddard Space Flight Center working on the Terra and Aqua Earth Observation System missions and the Tropical Rainfall Measuring Mission (TRMM). In addition to space exploration activities, Becca enjoy flying as a private pilot, playing field hockey, and participating in many outdoor activities. It is a thrill for her to share the excitement of space exploration and discovery with adventurers of all ages.

### Saturday NASA Education Presentation

#### **Elsie Weigel**

Elsie Weigel holds a BA in Mass Communications from the American University in Washington. She has held public communication positions in four national associations, the Department of Energy, and NASA.

Currently an Outreach Program Planning Specialist for NASA Human Space Flight, she has worked in Public Affairs, the Office of Education, and in numerous outreach program directorates at NASA Headquarters in Washington DC. In the past year she received three awards. She was awarded:

- the NASA Space Flight Awareness Award for exceptional contributions in the creation of outreach products that engage and educate broad segments of the public;
- the national Golden 2015 APEX Award for the best digital signage usage in business, industry and government; and
- a 2015 Communicator Award for the digital dome exhibit that accompanied the NASA Space Shuttles to their retirement museums around the United States.

She currently has a NASA Space Act Agreement with Michael Daut, Creative and Marketing Director of Evans and Sutherland, to create planetarium productions to inform and interest American and international audiences of NASA’s plans for the future human exploration of the Solar System and beyond.

## THURSDAY DELEGATE PRESENTATION DESCRIPTIONS

### **It Takes More Than Just Telescopes to Host a Successful Lunar Eclipse Viewing: Especially in the New York City Metro Area**

*Patrick McQuillan, Liberty Science Center*

In the New York City metro area there are a plethora of education/entertainment options from which individuals and families can choose. Add to that the possibility of clouds covering your main event, and you will need more than just telescopes to host a successful Total Lunar Eclipse event. Find out how we managed to get over 1750 attendees out to Liberty Science Center on a Sunday night at the start of the school year. Hint: it includes food/drinks, laser shows, moon drones, Mars rovers, science lectures, and giant hu-moon inflatable globes!

### **Preview of Evening Planets, August 2016 through September 2017**

*Robert C. Victor, Abrams Planetarium, Michigan State University*

Evenings in August 2016 feature all five naked-eye planets, including a striking lineup of Saturn, Mars, and Antares, and gatherings of Mercury, Venus, and Jupiter for binoculars low in twilight. Venus slips past Saturn in late October, and climbs high to approach (but not pass) Mars in late January-early February 2017. Venus exits quickly in late March, passing widely north of Mercury emerging for its best apparition of 2017. Two planets return to the eastern evening sky by their opposition dates: Jupiter in early April, Saturn in mid-June, and both remain as showpieces at evening star parties through summer. Faint Mars lingers in WNW twilight through May, and Mercury has an encore in July.

### **Droning On in the New 360° World**

*Tim Collins, Whitworth Ferguson Planetarium, Buffalo State (SUNY)*

As technology improves, it compels us to alter our methodology. Not only in teaching, but in presentation as well. With the advent of much more affordable equipment for completing professional projects, once-unobtainable photography and videography has morphed from 35-millimeter slides with stitched panoramas, to drone-capable aerial rendering of cinematic quality.

### **More History in Rhode Island**

*Francine Jackson, URI Planetarium*

Rhode Island has again come to the forefront of history, as it is believed that the remains of Captain James Cook's Endeavor have been found in Newport harbor.

### **Planetarium Pre-Visualization with an Oculus Rift**

*Frank Summers, Space Telescope Science Institute*

Producing sequences for a planetarium without ready access to a dome is a distorted geometric challenge. Fortunately, one can now use virtual reality to create a dome environment right at the desktop. This short talk will describe the rendering, projection, encoding, software, and hardware setup for a virtual dome pre-viz environment using an Oculus Rift VR headset.

### **Seeing Our World as Only NASA Can!**

*Maurice Henderson, SOS Project Engineer*

NASA and our partners have built an impressive constellation of remote sensing satellites that gives us nearly ubiquitous eyes on the Earth. The remote sensing program has built a data archive over 40+ years. Our data has become a virtual resource for researchers and resource managers worldwide. Building on our space exploration expertise we allow you to see our world as only NASA can.

## **FRIDAY PRESENTATION DESCRIPTIONS**

### **Move the Pointer Slowly**

*Alan Davenport, Maynard F. Jordan Planetarium, Retired*

There has been active interest in pointer design on the DOME-L listserve this year. This short demo will discuss the basic star point-out with a demonstration of a custom made LED pointer that can be seen in the presenter's poster session, and an engaging style of point-out.

### **Introducing the Next Generation Science Standards in Your Planetarium: 3-Dimensional Learning Should be Easy in Space**

*Patrick McQuillan, Liberty Science Center*

Seven states in the MAPS region have adopted the Next Generation Science Standards (NGSS). NGSS is a radically different method of teaching. It involves 3-dimensional learning (Science and Engineering practices, Disciplinary Core Ideas, and Crosscutting Concepts). Are you prepared to fluently engage your student audiences in NGSS??? We will look at some general astronomical concepts that lend themselves directly to the NGSS methodology.

### **Meditation in the Dome**

*Amie Gallagher, Raritan Valley Community College*

Are you looking for another way to use your dome? Don't have production time or a budget? Invite visitors in for a Meditation in the Dome.

## POSTER DESCRIPTIONS

### **Droning On in the New 360° World**

*Tim Collins, Whitworth Ferguson Planetarium, Buffalo State (SUNY)*

As a companion to the planetarium presentation, this poster will display drone footage, and allow the opportunity for discussion about techniques

### **LED Combat Hardened Pointer Custom Build**

*Alan Davenport, Maynard F. Jordan Planetarium, Retired*

There has been active discussion of new pointer design on the DOME-L listserv this year. This LED pointer was built of inexpensive, easily obtained parts to serve as an audience participation tool. The actual pointer will be on display during the poster session Friday morning.

### **The Planetarium Scholarship Fund**

*Thomas Wm. Hamilton, Hamilton Planetarium Scholarship Fund, Inc.*

This poster will display details of the Planetarium Scholarship, including the application form and some of the astronomical books which accompany the check. Please note that these grants are NOT based on need (so no financial details are asked for) but on how strongly the Trustees feel the applicant will contribute to their planetarium field.

### **The Hubble Space Telescope: New Views of the Universe Exhibit**

*Maurice Henderson, NASA Goddard Space Flight Center*

The Hubble Space Telescope exhibit is available for display at various venues across the country. The exhibit can fit in spaces 1200 – 2000 square feet, and is flexible enough to work in different configurations. View video of the exhibit and learn about how to get it to your site!

### **Mission: Mars - Application of the NASA CP4SMP(VC+) Award at the Saint Louis Science Center**

*Jordan Mogerman, James S. McDonnell Planetarium at the Saint Louis Science Center*

In 2013 the Saint Louis Science Center applied for, and received, a CP4SMP(VC+) grant from NASA. This grant has been used to improve the planetarium and a large gallery in the Science Center's main building to enhance the visitor experience while teaching visitors important science, technology, engineering and math (STEM) content focused on Mars exploration.

### **Preview of Evening Planets, August 2016 through September 2017**

*Robert C. Victor, Abrams Planetarium, Michigan State University*

As a companion to the presentation in the planetarium, this poster will consist of 14 monthly sky charts tracking the locations of stars of first magnitude or brighter and the naked-eye planets at evening mid-twilight, when Sun is 9 degrees below the horizon.

## WORKSHOP DESCRIPTIONS

### Workshop Block #1

#### **Let's Play: Interactive Gaming in the Planetarium (90 mins)**

*Talia Sepersky and David Rabkin, Museum of Science, Boston, MA*

In April 2016 the Charles Hayden Planetarium at the Museum of Science, Boston, ran an interactive gaming session for guests in the planetarium dome using the text-based adventure game "Space Station". This workshop will discuss what went into creating this session, play a limited version of the game itself, and with workshop participants explore ideas and topics for creating future planetarium gaming sessions that fall more in line with the stated mission of a science education institution.

#### **Music Scoring Workshop (45 mins)**

*Steve Dubois, Whitworth Ferguson Planetarium, Buffalo, NY*

Music is an integral part of our production work as planetarians. Choosing the right piece can create the proper mood, establish dramatic tension and even be used as a way to aid in teaching the material. Throughout the workshop, we will explore the various ways that music can be used, tricks and tips for effective transitions, understanding all the stylistic options available and when best to utilize them. Afterward you will have an opportunity to play the role of music director.

#### **SOFIA: NASA's Airborne Astronomy Ambassadors (45 mins)**

*April Whitt, Fernbank Science Center, Atlanta, GA*

NASA's Stratospheric Observatory For Infrared Astronomy (SOFIA) offers teams of teachers the opportunity to fly with scientists and technicians aboard the observatory. As the first teacher team from the state of Georgia, Susan Oltman and I spent a week last September working with the crew of SOFIA and teachers from Montana and New Mexico to develop materials and activities.

### Thursday Evening Plenary Workshop

#### **You're Not Ready for This Eclipse – Are You? (45 mins)**

*Ken Miller, GOTO Inc., Indianapolis, IN*

Prepare to learn eye safety, experience effective moon phase activities, and finally how to increase your planetarium's visibility, worth to the community and HOW TO MAKE HAY WHILE THE SUN DON'T SHINE! Learn the important difference between philanthropy and marketing, and how to "sell" an eclipse from Honolulu's "Mr. Eclipse" of the 1991 total eclipse.

## Workshop Block #2

### **Flip Your Dome! (45 mins)**

*Susan Button, Quarks to Clusters, Chittenango, NY*

I know what you are thinking, I represent portable domes and this is a term we frequently use, especially if a fire marshal asks us to demonstrate a second method of egress!

Well that is not what this workshop is about. We'll explore a way to turn things upside down to refresh lessons for you and your students. You can set up unique scenarios that challenge students to be more observant, solve problems and demonstrate that they have a real working knowledge of the topic you are teaching.

### **Legacy of the Film Industry (45 mins)**

*Michael Daut, E&S, Salt Lake City, UT*

How has the legacy of the film industry affected the grammar of digital Fulldome production? In what way are they similar and how are they different from one another? We will examine how to best use the fulldome medium to tell an effective story and create a memorable experience for the audience.

### **UV Bottles Ideashare (30 mins)**

*Led by various members*

How can you use color-changing, UV-sensitive water bottles? During this workshop, attendees will share ideas on how to use the UV-sensitive water bottles for activities and demonstrations. If time allows, the group will brainstorm other uses for the water bottles and other UV-sensitive materials like readily available color-changing beads.

### **EcoDetectives: Engineering Design Process in the Planetarium (90 mins)**

*Patty Seaton, Howard B. Owens Science Center, Lanham-Seabrook, MD*

Using the IDA's "Losing the Dark" video, 6<sup>th</sup> grade students at the HBOSC determine the many problems caused by light pollution. They then embark on the engineering design process, designing, building, and testing their own light fixtures for a lamp. Projects are evaluated by counting the number of stars in Orion in the planetarium sky (using Globe at Night sky maps) and using a Unihedron Sky Quality meter. Come try your hand at this process – see how well your design measures up!



## FULLDOME PROGRAM DESCRIPTIONS

### **Accidental Astronauts**

*Presented by Clark Planetarium*

Robo-kids Cy, Annie and their dog Armstrong get a lot more than they expected from their class field trip in an impromptu adventure. Travel along exploring the Sun, Earth and Moon, with a witty starship computer as navigator and guide. Race along on the surface of the Moon! Collect an asteroid sample in low gravity! Survive a solar storm! Find new appreciation for the unique beauty of Earth. Journey along with the Accidental Astronauts in this epic dome theater adventure.

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### **Asteroid: Mission Extreme**

*Presented by Sky-Skan and National Geographic*

*Asteroid: Mission Extreme* takes audiences on an epic journey to discover how asteroids are both a danger and an opportunity. The danger lies in the possibility of a cataclysmic collision with Earth; the opportunity is the fascinating idea that asteroids could be stepping stones to other worlds – veritable way stations in space – enabling us to cross the Solar System. Explore what it would take for astronauts to reach an asteroid and how such an adventure could benefit humankind. Available in fulldome 8K, 4K, 2D, 3D stereo, 30/60fps

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### **Moons: Worlds of Mystery**

*Presented by Museum of Science, Boston*

Take a journey through our solar system and explore the remarkable diversity — and surprising might — of moons! From volcanoes and geysers to ice-covered oceans and methane rain, these natural satellites have some spectacular features, and many even exert a surprising influence on their planetary partners. Learn what these celestial bodies reveal about the history and workings of our solar system.

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### **Solar Superstorms**

*Presented by Spitz, Inc.*

*Solar Superstorms* takes viewers into the tangle of magnetic fields and superhot plasma that vent the Sun's rage in dramatic flares, violent solar tornadoes, and the largest eruptions in the solar system: Coronal Mass Ejections. Focusing on the Sun's effects on Earth's atmospheric, communications, and power systems, the show features one of the most intensive efforts ever made to visualize the inner workings of the Sun, including a series of groundbreaking scientific visualizations computed on the Blue Waters supercomputer, based at the National Center for Supercomputing Applications (NCSA), U. of Illinois.

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### **To Worlds Beyond**

*Presented by Donetsk Planetarium*

A captivating journey from the fiery vicinity of the Sun to the icy edges of the Solar System. Come along and see the amazing world of the Sun, the planets and the satellites!

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## 2016 MARGARET NOBLE ADDRESS

### How I Got Here, From There, With A Little Help From My (Planetarium) Friends!

*Steve Russo*

Steve Russo, director of the East Kentucky Science Center and Planetarium, has spent the last 42 years teaching Astronomy and related topics in planetariums, science centers, colleges, and public schools.

After seeing a planetarium show at the age of five at the Hayden Planetarium in NYC, he told his parents that he wanted to work in a planetarium when he grew up.

He attended Wagner College in Staten Island, NY, as the college had a planetarium education program and received his BA in 1978. He then attended SUNY Oswego, where he received his Masters degree in Astronomy and Space Science education in 1989.

His span of over four decades in the planetarium field, included positions in eight different facilities in three different states, plus ownership of a portable Starlab, before landing the position of Director of the East Kentucky Science Center.

During his time in the planetarium field, Steve also spent two decades as a broadcast meteorologist, and spent several years as a live radio play by play announcer for a Houston Astros single A baseball team in Upstate, NY.

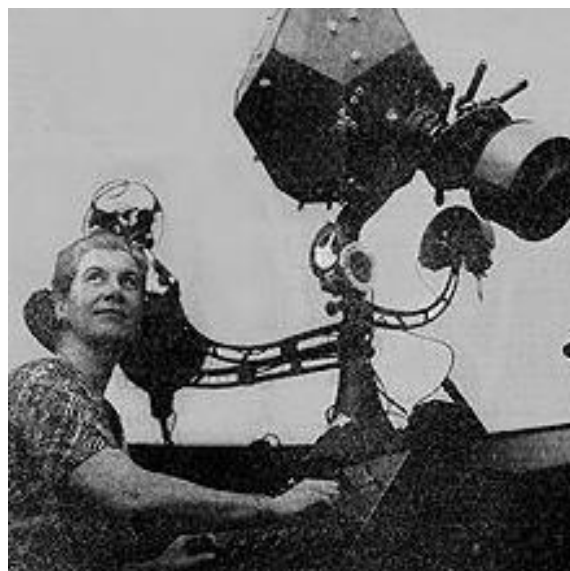
Steve was recognized as an IPS Fellow in 1992, A MAPS Fellow in 2010, and was presented with the MAPS Exceptional Service Award in 2012. Since taking over the East Kentucky Science Center in July of 2011, the EKSC was awarded the 2012 “Outstanding Organization Award” from the East Kentucky Leadership Foundation, and in April of 2015, because of his teachings of science to the people of eastern Kentucky, The Mayor of Prestonsburg presented Steve the “Key To The City”, and the Governor of Kentucky commissioned him as a “Kentucky Colonel”; the highest title of honor bestowed by the Commonwealth of Kentucky.

Steve and his wife Jan, who got married in a planetarium, live in Prestonsburg Kentucky, just down the road a piece from where Loretta Lynn, The Coal Miners Daughter, was born, and they enjoy the “Three M’s”; Mountains, Music, and Moonshine. And this is Kentucky so the Bourbon is pretty good too!

They volunteer at the Mountain Arts Center, a premier music hall in Prestonsburg, where Steve is on the Board of Directors.

After 42 years in the Planetarium Field, and at the age of 60, the word “retirement” is not part of Steve’s vocabulary.





The Margaret Noble Address is named in honor of one of the founding members of MAPS. Margaret Noble was a teacher and planetarian at Cardozo High School in Washington D.C. Her particular talents in persuasion, diplomacy, persistence and her passion for astronomy guided her efforts in bringing the universe to students.

We remember Margaret Noble as a mentor, an educator, a planetarian, a lobbyist and a dreamer. Her main goal in life was to inspire children to become interested in astronomy in particular and science in general. The presenters of the Margaret Noble address should exhibit similar traits and use the opportunity to share their wisdom and unique perspective on the state of planetarium education and its potential for inspiring both students and public audiences to higher aspirations in our time.

*~ Excerpt above from the 2013 Margaret Noble Address presentation given by Patty Seaton*