



2018

September 12-14
Seattle, WA

Live Interactive Planetarium Symposium

PACIFIC
SCIENCE
CENTER

PACIFIC SCIENCE CENTER

Welcome to the 2018 Live Interactive Planetarium Symposium. It is my pleasure to have you at Pacific Science Center and the Willard Smith Planetarium. I hope you will enjoy the conference and our exhibits.

Pacific Science Center began as the United States Science Pavilion during the 1962 Seattle World's Fair. Millions came to explore the wonders of science during the World's Fair and upon closing ceremonies, the Science Pavilion was given new life as the private not-for-profit Pacific Science Center, becoming the first U.S. museum founded as a science and technology center.

Since that time we have been a ground breaking institution, setting the standard for what it means to be a science center in the 20th and 21st Centuries. We are continuing that legacy today by experimenting with facilitated Virtual and Augmented Reality experiences, hoping to help define what the science center of the future looks like.

Originally installed in October 1977, the Willard Smith Planetarium has hosted thousands of families, adults, children and school groups. We have at least five live presentations every day including shows focused on our youngest pre-school guests, as well as all-ages shows that focus on the latest scientific research in astronomy, planetary science, Earth science and more. All of our shows are presented live and are interactive, allowing guests to ask questions and explore on their own.

It is a pleasure to welcome LIPS back to its roots. I know some of you were in attendance in 2008 when my predecessor, Karrie Berglund, hosted the Planetarium Share Fair, which later became LIPS.

Welcome to Seattle, Pacific Science Center, and the Willard Smith Planetarium.

Dave Cuomo
Supervisor Willard Smith Planetarium

Raven Harrell
Science Interpretations Staff Coordinator

Wednesday

| LIPS 2018 Schedule and Presentation Needs | | |
|---|---|------------------------------------|
| | What is Reality Lounge and Classroom | Willard Smith Planetarium |
| Wednesday | | |
| 8:00 - 8:30 | Breakfast setup | |
| 8:30 - 9:00 | Registration and breakfast (Breakfast in cafe) | |
| 9:00 - 9:30 | Welcome and Introductions | |
| 9:30 to 10:45 | Eddie Goldstein Workshop Part 1 | |
| 10:45 - 11:15 | Break | |
| 11:15 - 12:15 | | Eddie Goldstein Workshop Part 2 |
| 12:15 - 12:45 | | WSP staff, "Preschool Allstars" |
| 12:45 - 1:30 | | Naomi Pequette, "Space Tours Live" |
| 1:00 - 1:30 | Lunch setup | |
| 1:30 - 2:15 | Lunch | |
| 2:15 - 3:00 | Charissa Sedor, "Planetary Playhouse" | |
| 3:00 - 3:30 | SPONSOR PRESENTATION: AVI | |
| 3:30- 4:00 | Break | |
| 4:00 - 5:00 | Michael McConville, "Explain like I'm five" | |
| 5:00 - 5:30 | Kaoru Kimura, "How Do You Look for the Moon with a Star Wheel?" | |
| 5:30 to 5:45 | Mark Webb, "New Audience Data Regarding Live Presentation" | |
| 5:45 - 6:00 | Wrap | |

Thursday

| | Classroom | Willard Smith Planetarium |
|---------------|--|---|
| Thursday | | |
| 7:30 - 8:00 | Breakfast setup | |
| 8:00 - 8:30 | Breakfast--cafe | |
| 8:30 - 8:55 | Overview | |
| 9:00 - 9:30 | | SPONSOR PRESENTATION: Spitz |
| 9:45 - 10:30 | Ronn Kistler , "Training Volunteers to do Clear and Articulate Presenting" | |
| 10:30 – 11:00 | Break | |
| 11:10 – 11:40 | | Natalie Copeland, "Summer Sky Stories of Alexandria" |
| 11:45 - 12:15 | | Briana Ingermann, "Survivor Challenge: An Interactive Planetarium Lab Experience" |
| 12:20 – 12:50 | | Shira Moskowitz, "Forget Everything!" |
| 12:55 – 1:25 | SPONSOR PRESENTATION: Sciss | |
| 1:00 - 1:30 | Lunch Setup | |
| 1:30 - 2:15 | Lunch | |
| 2:15 - 2:45 | Amy Truksa, "A model for Elementary teacher professional Development" | |
| 2:45 - 3:30 | Alan Gould, "How Should I Organize this Activity?" | |
| 3:30 - 4:00 | Break | |
| 4:00 - 4:45 | Andy Kreyche, "A Quick Human Orrery" (exact location TBD) | |
| 4:45 – 5:30 | John Erickson, "Infrared Explorations" | |
| 5:30 – 5:45 | Wrap | |
| 5:45 - 6:00 | Break | |
| 6:00 - 8:00 | Reception (Building 2) | |

Friday

| | Classroom | Willard Smith Planetarium |
|---------------|---|--|
| Friday | | |
| 8:00 - 8:30 | Breakfast--cafe | |
| 8:30 - 8:45 | | Gather |
| 8:45 - 9:30 | | Kyle Doane "Oh to be Jung Again" |
| 9:40 - 10:10 | SPONSOR PRESENTATION: Seiler | |
| 10:10 - 10:40 | SPONSOR PRESENTATION: E & S | |
| 10:40 - 11:10 | Break | |
| 11:10 - 11:45 | Karrie Berglund "Future of LIPS" | |
| 11:50 - 12:50 | | Tom Barry "One More Time With Feeling" |
| 12:55 - 1:25 | | Brian Koehler, "Conrad Navigation Challenge" |
| 1:30 - 2:15 | Lunch | |
| 2:15 - 2:45 | Karrie Berglund "Evaluating Live Presentations" | |
| 2:45 - 4:00 | Wrap up and goodbyes | |

LIPS 2018 Program: Session Descriptions (Listed Chronologically by Presentation Time)

Wednesday, September 12

Eddie Goldstein Science Communication
Keynote workshop:

Presenting a live show in a planetarium isn't a lecture, it is a performance! **You** are the performer. In this keynote workshop, Eddie Goldstein draws from over 30 years as a museum science educator and 45 years as a professional performer to help bring out the performer in you. Learn to use tried and true performing techniques to raise your planetarium shows to a new level. Not only will it be more fun for your audiences, it will be a better educational experience as well. For more information, visit EddieGoldstein.com

WSP staff, "Preschool Allstars"

At the Willard Smith Planetarium we have a number of short presentations for our youngest guests. A WSP planetarian will present a 15 minute show, then have a discussion with the group on best practices when working with very young guests.

Naomi Pequette, "Space Tours Live"

Space Tours Live! is a guest-driven, live, interactive digital planetarium show at the Denver Museum of Nature & Science's Gates Planetarium. A host guides the audience on their journey through the solar system following one of three different themes, but using requests from the crowd to build a show narrative that appears fresh each time. After presenting the show, we will have a lively discussion about best practices of development and implantation of new live shows as well as strategies for audience engagement.

Charissa Sedor,
"Planetary Playhouse: Getting the Audience Involved (Without Blowing Your Budget)"

How can you create a rich, interactive show environment on a very small budget? How can you involve the audience before and throughout a show? Can you operate an animatronic robot, play the theremin, or drop a slinky? The Buhl Planetarium has made it a priority to add theatrics into new shows, where the audience joins in and stays active participants, instead of passive observers. Be it by costumes, props, and games, you can work in a way to have your audience perform the show with you!

Wednesday, September 12

Michael McConville, "Explain Like I'm Five: Communicating Complexity with Sincerity"

One of the defining aspects of live planetarium presentations is audience interaction -- and there's always bound to be a younger audience member who wants answers to the Universe's most complex questions. While we might be experts on the topics we discuss, or at least have a strong comprehension of how those things work, communicating to an audience with a wide range of ages and backgrounds forces us to reassess how we translate what we know into understanding.

"ELI5" is an intellectual challenge to explain the cosmos without talking down to our audiences. We'll break into small groups, each tasked with randomly-chosen astronomical concepts, and will present our "findings" to the rest of the groups. This is a workshop that stresses storytelling and synthesizing information quickly, while remaining accessible to our audiences.

Kaoru Kimura, "How Do You Look for the Moon with a Star Wheel?"

We will use data set of coordination of the Sun and the Moon, and we will learn about the relationship between the Sun and the moon angle on the star wheel.

Mark Webb, "New Audience Data Regarding Live Presentation"

Adler Planetarium has been collecting audience data during the Summer of 2018. Preliminary results of the survey data will be seen for the first time.

Thursday, September 13

Ronn Kistler, "Training Volunteers to do Clear and Articulate Presenting"

How can our volunteers become clear and articulate when speaking with visitors, while leading group activities, and during presentations to audiences? In this session, we will experience, as though we were trainees, some simple, short exercises seeking to develop strong projection and faultless diction. There will be time for all of us to share ideas and react to each others strategies.

learn the basics of celestial navigation. In this session, we will use the dome to place the audience on a random location on the globe, at a random time of the year. The goal is to work in groups to figure out your latitude, your longitude, and approximately what time of year it is, using only your observational skills and a watch set to local Seattle time.

Natalie Copeland, "Summer Sky Stories of Alexandria"

Travel back in time to 2nd century Alexandria for a night of stargazing and storytelling! In this clearing you'll meet a direct student of the great astronomer Claudius Ptolemy, who will lead you on a mythic journey through the Greco-Roman summer skies. Help them re-tell these classic tales in this theatrical blend of puppetry, projection, and play.

Shira Moskowitz, "Forget everything – What Do You See? Reimagining Star Pictures"

Ever struggle to modify a sky program that works with older students into one that works as well with younger groups? This was a problem for me, and with a little experimenting I found a way to keep all kids engaged regardless of age. Hear how I simplified and strengthened a classic star show into one that empowers first and second graders to use their imagination while exploring the night sky. There will be a time to test out the activities and share ideas and strategies.

Briana Ingermann, "Survivor Challenge: An Interactive Planetarium Lab Experience"

Geared toward high school and undergraduate students, Fiske Planetarium has developed an interactive lab experience using the capabilities of the planetarium theater for helping students

Thursday, September 13

Amy Truksa, "A Model for Elementary Teacher Professional Development"

Portable planetariums offer an excellent tool for expanding the opportunity for live, interactive planetarium experiences to many more classrooms of children than are able to visit a fixed dome. I developed an 18-hour workshop for elementary teachers who took the course for continuing education credits. The goal was to teach them some basic astronomy content, example activities, how to use our portable planetarium, and how to present a short lesson in the portable dome.

Alan Gould, "How Should I Organize this Activity?"

This session will be based on the Planetarium Educator's Workshop Guide module entitled Organizational Patterns, where the goal is to become aware of many different ways in which you can organize the planetarium experience for your audience. Each organizational technique will be illustrated by an overview of an example activity and for each one we'll discuss the advantages and disadvantages of that technique. It's a "meta-activity" aimed at analyzing planetarium activities.

Andy Kreyche, "A Quick Human Orrery"

Inspired by much more elaborate activities, this simplified version is designed to be used as a pre-show lesson. It starts with a deceptively straightforward question and then involves students physically, having them set up the basic structure for a simple model of the solar system. This gets a school group actively thinking and participating from the get-go. The demonstration that follows uses students to portray the Earth and other planets within the solar system, acting out their basic motions.

John Erickson, "Infrared Explorations Under the Dome: What Worked, What Didn't and What Else?"

Anticipating the Launch of the James Webb Space Telescope, the planetarium at Lawrence Hall of Science has been running a program about telescopes, how they work, and what makes the JWST special. As part of the program we include authentic observations of infrared light sources. We have tested various ways to do this and tried a few with our visitors.

Friday, September 14

Kyle Doane, "Oh to be Jung Again! A Cosmic Perspective"

During the course of LIPS, write down actual nighttime dreams that you have. On the last day of the conference, we will read randomly chosen dreams and associate characters from our dreams with asterisms in the night sky. Perhaps we will notice a pattern from our dreams which will create a whole new story? Will this story reveal our deeper purpose for being at LIPS?

Tom Barry, "One More Time with Feeling: Emotion and the Planetarium Experience"

Presenters show how they inject humor, empathy and wonder into their planetarium shows to help connect their audiences to the content by forging an emotional connection with the group. The best bad jokes, heart-tugging moments and "in the palm-of-the-hand" experiences of all the participants will be gathered and shared.

Brian Koehler, "Conrad Navigation Challenge"

This summer, the Treworgy Planetarium developed a new interactive team-building activity for use under our 30-foot dome. This program provides a practical application of celestial navigation in a maritime setting, in the context of the Joseph Conrad, one of the Museum's signature vessels. After viewing the stars in a "mystery location", visitors are assembled into "crews" and all are assigned specific roles (Captain, Mate, Cook, etc). Each crew member has a special role to play in the "Conrad Challenge", and only by working together can the crew solve the location of this "mystery sky".

Karrie Berglund, "Evaluating Live Presentations"

Watching other people present can be a tremendous opportunity for both the presenter and the observer to improve their programs and presentation skills. What characteristics do you look for in a successful live presenter? How do you prefer to receive feedback on your own presentations? What presentation ideas/comments/critiques have you received that were particularly helpful?

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(Listed alphabetically; representative contact information included in attendees list)



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