

IPS 2020 Virtual Conference Schedule

Monday, August 3

- 3:00 – 3:30 PM (Universal Time): **Introductions and Breakout Sessions**
Introduction to the IPS virtual conference and 15 minute breakout sessions
- 3:35 – 3:55 PM (Universal Time): **The Continuum of Interactivity**
Panelists include: Richard Gelderman, Guilherme Marranghello, Angela Perez and Sara Schultz
- 4:00 – 4:30 PM (Universal Time): **Extreme Outreach**
Presenters Include: Saeid Aghaei, Brian Baker, Alexandre Cherman, Bryant Gonzalez, Guilherme Marranghello and Susan Murabana
Six planetarians describe their outreach to very different populations. Bryant Gonzalez will speak on Extreme Outreach: Hitchhiking Across South America, Tales of an Astronomical Backpacker. Guilherme Marranghello: Extreme Outreach: A Portable Planetarium in the very South of Brazil. Brian Baker: Extreme Outreach: Researching the Night Sky in Eastern North Carolina. Susan Murabana: Extreme Outreach: Travelling Telescope Overland Education Expedition in Remote Schools in Kenya. Alexandre Cherman: Bringing astronomy to Public Schools in the outskirts of Rio de Janeiro. Saeid Aghaei: An astronomy voyage with a tent around the Middle East.
- 4:35 – 4:50 PM (Universal Time): **Digistar 7 First Look and more with new E&S+Spitz head Jeb Terry**
Presented by: Jeb Terry, Kevin Scott, Scott Huggins, Estelle Pacalon, JT Towne, Michael McConville
Hands-on with brand new Digistar 7 software features and a backstage look at E&S and Spitz developments
- 4:55 – 5:10 PM (Universal Time): **Outreach with a Portable Planetarium**
Panelists Include: Marco Avalos, Susan Button, Ruth Grützbauch, Tilo Hohenschlaeger, Guilherme Marranghello and John Meader
During this session panelists will share their experiences and advice about marketing, scheduling, presentation techniques for various grade levels, how to successfully run a program with an analog or a digital projector, program evaluation, unique presentation venues, and other topics you may request.
- 5:15 – 5:30 PM (Universal Time): **Professional Development and Cultural Exchange Opportunities**
Presenters Include: Susan Button, Ruth Grützbauch, Tilo Hohenschläger, Andy Kreyche, Guilherme Marranghello, John Meader and Michele Wistisen
Would you like to travel to a foreign country or host a colleague from another country?
- 5:30 – 6:30 PM (Universal Time): **IPS General Meeting #1**
- 6:35 – 7:20 PM (Universal Time): **Indigenous Astronomy Panel – Best Practices and Partnerships**
Presenters Include: Wildred Buck, Ka'iu Kimura, Annette Lee and Milagros Varguez
Indigenous people have nurtured critical relationships with the stars, from keen observation and sustainable engineering to place-based ceremony, navigation, and celestial architecture for tens of thousands of years. The Indigenous relationship and knowledge of the sky is exceptional in that it encompasses mind, body, heart, and spirit. This panel is organized by the IPS's newly formed Indigenous Astronomy Working Group. It brings together Planetarium Professionals, Indigenous Star Knowledge Keepers, Indigenous Astronomy experts, Cultural Astronomers, and allies of Indigenous STEM communities from Canada, U.S., and internationally to discuss best

practices for dissemination of indigenous astronomy specifically for science communicators and the planetarium community.

- 7:25 – 7:30 PM (Universal Time): **Sky-Skan Collaborations**
- 7:35 – 7:55 PM (Universal Time): **Musical Moments of Wonder**
Presenters Include: Derek Demeter, Patty Seaton, Mike Smail and Michele Wistisen
From commissioned music specific for the dome environment to simple musical additions for public star programs, we seek to create musical moments of wonder under the dome. Our session invites you to share a taste of some of these wonders to help inspire your own musical innovations.
- 8:00 – 8:20 PM (Universal Time): **Voyagers - Lessons Learned through Collaborative Production of a Live Full Dome Musical**
Presenters Include: Sadie Bowman, Ricky Coates and John Keller
Live theatre is a powerful experience that fosters imagination, abstract thinking skills, and empathy. Synergizing this dynamic with the full dome environment immerses audiences in stories with emotional immediacy and lasting impact. This session provides a case study of a successful collaboration with professional theatre artists to develop an original musical theatre production to enhance the dome's storytelling capacity. Participants will be treated to an excerpt from the full dome musical Voyagers along with perspectives from Matheatre and the Director of Fiske Planetarium on the development and dissemination of this unique live performance opportunity.
- 8:25 – 8:30 PM (Universal Time): **ASTERION – the new ZEISS Starball for Hybrid Planetariums**
There is no longer a reason to do without a brilliant starry sky
- 8:30 – 9:30 PM (Universal Time): **BREAK**
- 9:30 – 9:50 PM (Universal Time): **Climate Change in the Dome**
Panelists Include: Julieta Aquilera, Jane Ashong, Ka Chun Yu and Shawn Laatsch
Climate Change is a key issue and planetariums have some unique ways we can share this science with our audiences. This presentation will look at how planetariums can be a key resource in sharing the science and dispelling the misconceptions around this subject. Our domes can help us share our planet, Earth, with our audiences in unique ways.
- 9:55 – 10:05 PM (Universal Time): **Teaching the Tilt: The Most Difficult Concept in All K-12 Astronomy It Can Be Done!**
Presenters Include: Patricia Reiff and Carolyn Sumners
The State of Texas mandates that it's 5th graders know that the seasons are caused by the tilt of the Earth's axis as Earth orbits the sun. Most of the students who answer the question correctly have memorized the answer. This dome workshop shows how to turn the tilt into meaningful concept learning and how to measure what students are learning during a planetarium program. The key is the Missing Step that science teachers fail to teach.
- 10:10 – 10:20 PM (Universal Time): **Planetarium education; the Mexican case.**
Presenter: Alejandro Casales Navarrete
The planetarium democratise knowledge to a diverse audience and contributes to the potential of formal and informal education. However, its virtues and advantages have not been taken advantage in Mexican education, since the planetarium has no significant relationship with the processes of formal and informal learning. Therefore, the social problem that will be exposed comes from the rights in education in three dimensions: the dimensions of responsibility, respectability, and accountability.

- 10:25 – 10:45 PM (Universal Time): **The Big Astronomy Project: Striving to Create a New Model for Planetarium Content**

Presented by: Renae Kerrigan, Shannon Schmoll, Tiffany Wolbrect and Ryan Wyatt

The Big Astronomy Project: Striving to Create a New Model for Planetarium Content Ken Ackerman Renae Kerrigan Valeria Foncea Rubens Shannon Schmoll Tiffany Wolbrect Ryan Wyatt Big Astronomy is a National Science Foundation funded project to explore the Dome+ model – a series of products that include a planetarium show distributed free or for a minimal fee in both English and Spanish, a website that hosts resources, live social media programs, and hands-on activity kits that work together to extend learning beyond the dome. Research on the effectiveness of this model and pathways through multiple related products to a planetarium show will be carried out by Michigan State University. Big Astronomy | Astronomia a Gran Escala will share the story of the people and places who make big astronomy happen. Beyond this specific show, we hope that the Dome+ model will provide a framework for creating synergistic content around future productions. Learn about the innovative methods of capturing high-resolution fisheye video at numerous remote locations in Chile, the groundbreaking discoveries enabled by these advanced facilities, the ongoing live events featuring observatory staff, the related online educational resources, and there.
- 10:40 – 10:45 PM (Universal Time): **Introduction of the GOTO new product**

Presented by: Mark Webb
- 10:50 – 11:10 PM (Universal Time): **Science Storytelling for the Planetarium**

Panelists Include: Ka Chun Yu, Dani LeBlanc, Carolyn Collins Petersen and Ryan Wyatt

Storytelling is a fundamental skill for anyone who plans to deliver a presentation or write a script for the dome. However, most planetarians learn about storytelling on the fly, discovering by trial and error what works and what does not. This session will help remove some of the mystery behind this skill by covering the science behind storytelling; structures for creating engaging science stories; guidelines for storytelling and scriptwriting for an immersive medium; and expanding on the spatial and embodied experience defined by the “Academy style” of fulldome storytelling.
- 11:15 – 11:35 PM (Universal Time): **Big Climate Change: How to survive and thrive when your planetarium weathers a disaster - a case study of the Robeson Planetarium and Project Phoenix**

Presented by: Tim Barry and Ken Brandt

The Robeson Planetarium was flooded three years ago by Hurricane Matthew - almost two meters of water inundated the building, destroying all the equipment and rendering it uninhabitable - and three more major hurricanes have hit since then. Yet Big Climate Change didn't stop science teaching for Robeson County students! Continuous operations shifted to a mobile dome, a board of directors and non-profit were created from the community, and planning and fundraising is underway to rebuild a new permanent planetarium. Code name: Project Phoenix!