

LIPS 2023 Schedule

All events will take place at the Michigan Science Center, located at 5020 John R Street, Detroit, MI.



LIVE
INTERACTIVE
PLANETARIUM
SYMPOSIUM

Monday, September 11

5 to 7 pm: Opening reception with heavy hors d'oeuvres and non-alcoholic beverages.

Tuesday, September 12 (See session descriptions below table)

Time	Location	Presenter(s)	Title
9 – 9:45	Glassroom (Classroom-style setting)	Everyone! (Karrie and Paulette will facilitate)	Introductions and overview of LIPS
9:45 – 10:15	Glassroom	Richard	Analysis of Discourse Dynamics
10:15 – 10:40	TBD	----- Break -----	
10:40 – 11:20	Glassroom	Karrie	Preparing Audiences to Interact
11:25 – 12:10	Glassroom	Ryan	Lies of Omission in the Dome
12:10 – 1	TBD	----- Lunch -----	
1 – 2	Science Stage	----- Improv workshop -----	
2 – 2:30	Science Stage	Andy and Mark W.	Reflections on improv workshop
2:30 – 2:50	TBD	----- Break -----	
2:50 – 3:10	IMAX Dome Theatre	Paulette	Laser Fantasy sponsor presentation
3:20 – 4:15	Planetarium	Shira	Audience Participation Science Toolkits
4:20 – 4:50	Planetarium	Erik and Michael	ecLIPSeS (also serving as Cosm sponsor presentation)
4:50 – 5ish	Planetarium	Karrie	Wrap up, reflections on day 1

Tuesday session descriptions (listed chronologically)

- **Analysis of Discourse Dynamics:** In this session, a jointly achieved scrutiny of myriad chronicled interactive options with audiences will be pursued to better elucidate their innate quintessence.
- **Preparing Audiences to Interact:** Many large planetariums these days play exclusively or primarily prerecorded content. This trend has primed many audiences to be passive viewers rather than active participants. What can we do to increase the level of audience participation from the very beginning of a program? We will look at ideas for wording of program descriptions on websites or brochures as well as strategies immediately before and during the planetarium presentation.
- **Lies of Omission in the Dome:** Humanity has an incredible depth of knowledge about the extremely complex universe around us. As planetarians we strive to educate and inspire audiences. At what point do we lose engagement and knowledge retention when explaining complex topics? Can we omit advanced details to better inspire audiences? Does this diminish our scientific credibility? Come join the discussion!
- **Audience Participation Science Toolkits: an Interactive Experience in Covid Times:** Balls, flashlights, telescopes, and star maps, these are some of the items one might use as audience participation kits as part of an interactive program in a planetarium. Learn how to use them effectively, share ways you use science tool kits in your own programs and participate in a hands-on activity to explore examples of the kits usage in a live interactive planetarium show.
- **ecLIPSeS:** Erik Johnson and Michael McConville will offer tips for interactive activities in the dome to prepare audiences for the solar eclipses in October 2023 and April 2024 and present scripted segments using Digistar software.

Wednesday, September 13

Time	Location	Presenter(s)	Title
8:45	Glassroom	Karrie to lead	Gather up, overview of the day
9 – 9:50	Science Stage	Nick, Nina, MacKenzie, and Aris	Interactive Solar Activities Focused on Ancient and Modern Sun-Watching
10 – 10:20	Planetarium	Pat	ePlanetarium sponsor presentation
10:25 – 10:35	Planetarium	Steve	RSA Cosmos sponsor presentation
10:35 – 10:55	TBD	----- Break -----	
10:55 – 11:25	Glassroom	Daniel and John	Pursuing Active Learning Approaches in Planetarium Settings
11:30 – noon	Glassroom	Andy	Transtemporal Travel, part 1
Noon – 12:40	TBD	----- Lunch -----	
12:40 – 1:30	Glassroom	Andy	Transtemporal Travel, part 2
1:35 – 1:50	Planetarium	Kyle	Do You See What I See?
1:55 – 2:15	Planetarium	Richard and Karrie	Digitalis sponsor presentation
2:20 – 2:30	Planetarium	Beth	SSIA Technologies sponsor presentation
2:30 – 2:50	TBD	----- Break -----	
2:50 – 3:35	Glassroom	Emily	One Sky Project
3:40 – 4:10	Glassroom	Perry and Kevin	Planetarium Green Screen Videos
4:15 – 4:50	Glassroom	Karrie	Future of LIPS conversation
4:50 – 5ish	Glassroom	Andy	Wrap up, reflections on day 2

Wednesday session descriptions (listed chronologically)

- **Interactive Solar Activities Focused on Ancient and Modern Sun-Watching:** The NASA PUNCH Outreach team developed a suite of field-tested activities supporting multi-sensory, multicultural, and social-emotional learning related to solar science. Experience a sampling of our interactive activities in preparation for - and in celebration of - upcoming eclipse events (and beyond)!
- **Pursuing Active Learning Approaches in Planetarium Settings:** The results of our two recent research studies describe a typical planetarium learner, how frequently planetariums are used, and how planetarium instruction compares with classroom experiences for certain learners. These studies suggest that the pedagogy used in planetarium instruction closely mirrors the traditional passive learning rather than the active learning that has been shown to be more effective, even by instructors who use active learning techniques in their lecture classrooms. Active-learning interventions like Clicker questions and whiteboard discussion have been shown to enhance learning in classroom spaces for both K-12 and higher education learners, and such inclusions in the planetarium may enhance learning outcomes in that environment, too. Our next proposal will be to pursue this line of research, and we'll be calling for collaborators and participants to join us.
- **Transtemporal Travel** (two parts): Time travel is possible. And no flux capacitor is required. You will travel nearly 100 years into the past. With resources reflecting astronomical knowledge current to the year 1928, you and fellow collaborators will design an interactive program relevant to 21st century audiences. We hope these ideas and resources will be developed further in the year ahead, with a report back on their use at a LIPS 2024 session!
- **Do You See What I See?:** An improv game to explore "seeing" as your audience sees.
- **One Sky Project - Engagement Curricula for Thoughtful Interconnections Workshop:** The One Sky Project is an international collaboration focused on increasing understanding about cultural and indigenous astronomy, its historical and modern applications, and how our One Sky connects us all. This collaborative has worked together to produce seven planetarium film shorts that touch on topics of finding patterns and building tools that foster connection to the sky and leverage astronomical phenomena to advance societal goals. All of the films of the One Sky Project are now available for free download and use through NSF NOIRLab. More Information here: <https://noirlab.edu/public/news/noirlab2316/>

As these amazing shorts are freely available, now would be a wonderful time to discuss amongst the LIPS community how to utilize these materials in lessons and create thoughtful discussion and engagement as we share in the many perspectives of our One Sky.

- **Planetarium Green Screen Videos:** Learn how to use Google Slides and We Video to create green screen animations that project onto the planetarium. Use this to create fantastic opening / closing sequences for planetarium shows or "interactive" theatrical videos within your show.
- **Future of LIPS:** In this LIPS tradition, the group will discuss what worked, what didn't, and where we might go next.

Thursday, September 14

Time	Location	Presenter(s)	Title
8:45 – 8:55	Glassroom	Karrie to lead	Gather up, overview of the day
9 – 9:20	Glassroom	Christa	AVI sponsorship presentation
9:25 – 9:35	Glassroom	Mark W.	GOTO sponsor presentation
9:40 – 10:30	Planetarium	Nina and Aris	Worlds of Curiosity: Engaging Youth with Minecraft and Astronomy
10:30 – 10:50	TBD	----- Break -----	
10:50 – 11:10	Planetarium	Shira	Using Your Senses: A Havdalah Experience
11:15 – noon	Planetarium	Emily	The Search for the Nocturnal Extreme! A Planetarium Haunted House
Noon – 12:45	TBD	----- Lunch -----	
12:45 – 1:30	Planetarium	Kyle	Cosmic Connections
1:35 – 2:20	Planetarium	Michael	Building a Stronger Planetarium Community – IPS Update
2:20 – 2:45	Wrap up, final thoughts	Karrie to lead	
2:45 - ?	All available hands to clean up/reorganize the Michigan Science Center.		

Thursday session descriptions (listed chronologically)

- **Worlds of Curiosity: Engaging Youth with Minecraft and Astronomy:** What if Earth had no moon? What if our planet was tilted on its side like Uranus? Meeting youth in the world of Minecraft is a powerful tool to encourage scientific exploration. Join our session to investigate the wonders of hypothetical astronomy environments and uncover deeper quandaries together.
- **Using Your Senses: A Havdalah Experience:** Science and culture combine to create an experience like none other. I was approached by the PJ Library to create a planetarium program that includes the Havdalah ceremony, which is ritual that separates the end of Shabbat from the rest of the week using our senses. The Jewish calendar uses the Moon to track the month, and holidays start at sundown. See how we combined the rituals of the Jewish culture into an interactive planetarium program that also shares the science behind it.
- **The Search for the Nocturnal Extreme! A Planetarium Haunted House:** In preparation for a Halloween event we asked ourselves, 'How could we make the theatrical-educational space of the planetarium a haunted house-like experience.' Themed to match the event theme of Spooky creatures of the night (nocturnal animals), an experience was created that invited guests as science officers into the planetarium (space ship) in a mission to try to find the most extreme nocturnal creatures (speculative) in the solar system.

This interactive program encouraged guests to make their own observations on day/night and how day and night would be different on other worlds and even how that could affect the anatomy of the creatures that lived there.

- **Cosmic Connections:** Every culture has had their own unique view of the night sky based on dreams and fears. What will the sky reveal to us about ourselves tonight? In this show inspired by "StarBall" we find new messages, meanings and myths as we re-connect to the cosmos.
- **Building a Stronger Planetarium Community – IPS Update:** Join Michael McConville, president of the International Planetarium Society, for updates on the planetarium Centennial, the IPS 2024 conference in Jena and Berlin, and the latest data from the IPS Financial Equity survey.