

Lunar Surface Science Virtual Workshop #13

Inclusive Lunar Exploration

January 26–27, 2022

Virtual

Times listed are U.S. Pacific Standard Time (PST) and Eastern Standard Time (EST).

Wednesday, January 26, 2022

Time (PST)	Time (EST)	Speakers (*)	Title
INTRODUCTION			
9:00 a.m.	12:00 p.m.		Welcome
9:05 a.m.	12:05 p.m.	Kristen Bennett, Parvathy Prem	Workshop Overview, Goals, and Ground Rules
9:15 a.m.	12:15 p.m.	Dave Draper	Diversity and Inclusion at NASA (Invited)
UNDERSTANDING OUR COMMUNITY			
Session Chairs: Christian J. Tai Udovicic, Kristen Bennett Documentarian: Alex Sehlke			
9:25 a.m.	12:25 p.m.		Session Introduction
9:30 a.m.	12:30 p.m.	Edgard Rivera-Valentín, Julie Rathbun	Who is Missing in Planetary Science? (Invited)
9:40 a.m.	12:40 p.m.		Q&A
9:45 a.m.	12:45 p.m.	Jackelyne Silva-Martinez*, Herbert Silva	Diversity and Inclusion in the Aerospace Industry
9:52 a.m.	12:52 p.m.	Brian Troutman	Diversity in Space Exploration
9:59 a.m.	12:59 p.m.	Adeene Denton	Untangling Feminism, Nationalism, and Space Exploration in the Age of Artemis
10:06 a.m.	1:06 p.m.		Q&A
10:11 a.m.	1:11 p.m.		Discussion: Sharing Stories and Experiences
10:40 a.m.	1:40 p.m.		Break
CREATING SYSTEMIC CHANGE			
Session Chairs: Lori M. Pigue, Parvathy Prem Documentarian: Christian J. Tai Udovicic			
11:10 a.m.	2:10 p.m.		Session Introduction
11:15 a.m.	2:15 p.m.	Ryan Watkins	Promoting Inclusive Work Environments: PRISM Inclusion Plan Pilot Program (Invited)
11:20 a.m.	2:20 p.m.	Janet Vertesi	Social Science Insights for a Diverse Lunar Workforce (Invited)
11:30 a.m.	2:30 p.m.		Q&A
11:35 a.m.	2:35 p.m.	Eleanor S. Armstrong	Communities and Public Narratives (invited)
11:45 a.m.	2:45 p.m.		Q&A
11:50 a.m.	2:50 p.m.		Discussion: Sharing Strategies and Resources Part I
12:15 p.m.	3:15 p.m.		Break
PATHWAYS AND BRIDGES			
Session Chairs: Nandita Kumari, Kristen Bennett Documentarian: Lori M. Pigue			
12:40 p.m.	3:40 p.m.		Session Introduction
12:45 p.m.	3:45 p.m.	Kathryn Gardner-Vandy	The Braided River STEM Workforce Development Model: Applications for Lunar Science (Invited)
12:55 p.m.	3:55 p.m.		Q&A

1:00 p.m.	4:00 p.m.	Sara Torres	Exploring the “How” of Contributing to Equity, Inclusion, Diversity in the Lunar and Planetary Community (Invited)
1:10 p.m.	4:10 p.m.		Q&A
1:15 p.m.	4:15 p.m.	Caitlin Ahrens*, C. Runyon	Bringing Lunar Science to the Deaf and Blind Communities
1:22 p.m.	4:22 p.m.	Alexandra Matiella Novak*, A. Shaner, C. Shupla, L. A. Rubino-Hare, S. Shebby, S. Buxner	Preparing for More Inclusive Public Engagement
1:29 p.m.	4:29 p.m.		Q&A
1:34 p.m.	4:34 p.m.		Discussion: Sharing Strategies and Resources Part II
1:54 p.m.	4:54 p.m.		Reflections
2:00 p.m.	5:00 p.m.		Adjourn

Thursday, January 27, 2022

Time (PST)	Time (EST)	Speakers (*)	Title
OUTER SPACE FOR ALL			
Session Chairs: Caitlin Ahrens, Parvathy Prem			
Documentarian: Nandita Kumari			
9:00 a.m.	12:00 p.m.		Welcome
9:05 a.m.	12:05 p.m.	Kristen Bennett, Parvathy Prem	Day 1 Recap, Goals, and Ground Rules Reminder
9:10 a.m.	12:10 p.m.		Session Introduction
9:15 a.m.	12:15 p.m.	Elisha Jhoti*, G. D. Tolometti, A. Link, A. C. Stadermann, N. B. Treviño	NextGen Lunar Exploration Ethics Panel Summary
9:25 a.m.	12:25 p.m.	Edythe E. Weeks	Methods for Including Everyone in the Outer Space Development Processes: Space Law Provisions (Invited)
9:35 a.m.	12:35 p.m.		Q&A
9:40 a.m.	12:40 p.m.	Richard Shope	Relationships and Conflicts Between Indigenous Nations and Space Agencies (Invited)
9:50 a.m.	12:50 p.m.		Q&A
9:55 a.m.	12:55 p.m.	Linda Billings	The Language and Culture of Space Exploration (Invited)
10:05 a.m.	1:05 p.m.		Q&A
10:10 a.m.	1:10 p.m.	James Lowenthal, Aparna Venkatesan	A Call for Action from the SATCON2 Community Engagement Working Group (Invited)
10:20 a.m.	1:20 p.m.		Q&A
10:25 a.m.	1:25 p.m.		Discussion: What Does Ethical Lunar Exploration Look Like? Part 1: Perspectives
10:45 a.m.	1:45 p.m.		Break

TECHNICAL CHALLENGES AND SOLUTIONS			
Session Chairs: Christian J. Tai Udovicic, Kristen Bennett			
Documentarian: Alex Sehlke			
11:10 a.m.	2:10 p.m.		Session Introduction
11:15 a.m.	2:15 p.m.	Karl Hibbitts	The Expected Scale of Sustained Resource Extraction from the Lunar Surface
11:22 a.m.	2:22 p.m.	Marc Avila*, C. Heinicke	Where Do We Want to Go? Sustainable Human Mars Exploration as a Guideline for a Sustained Human Presence on the Moon
11:29 a.m.	2:29 p.m.	Joel Levine	Exploring the Moon Responsibly: Monitoring the Impact of Human Activities on the Structure of the Lunar Atmosphere
11:36 a.m.	2:36 p.m.	Matthew Kuhns	Masten Space Systems' FAST Landing Pads
11:43 a.m.	2:43 p.m.		Q&A
11:50 a.m.	2:50 p.m.		Discussion: What Does Ethical Lunar Exploration Look Like? Part 2: Technical Considerations
12:10 p.m.	3:10 p.m.		Break
ACCOUNTABILITY AND ETHICAL EXPLORATION			
Session Chairs: Alex Sehlke, Parvathy Prem			
Documentarian: Caitlin Ahrens			
12:35 p.m.	3:35 p.m.		Session Introduction
12:40 p.m.	3:40 p.m.	Athena Coustenis*, Niklas Hedman*, G. Kminek, COSPAR Panel in Planetary Protection	Updates to the COSPAR Policy on Planetary Protection Regarding Lunar Exploration
12:50 p.m.	3:50 p.m.	John Rummel	COSPAR's Panel on Exploration: Current Status and Potential Futures (Invited)
1:00 p.m.	4:00 p.m.		Q&A
1:05 p.m.	4:05 p.m.	Kathryn Hadler*, K. H. Joy	Leave No Trace: Remediation on the Moon After Resource Extraction
1:12 p.m.	4:12 p.m.	Elizabeth Frank	Social License to Operate for Space Exploration
1:19 p.m.	4:19 p.m.	Alex Gilbert	Space as a Human Environment: Environmental Policy and Law for the Moon (Invited)
1:29 p.m.	4:29 p.m.		Q&A
1:34 p.m.	4:34 p.m.		Discussion: What Does Ethical Lunar Exploration Look Like? Part 3: Accountability and Policy
1:54 p.m.	4:54 p.m.		Reflections
2:00 p.m.	5:00 p.m.		Adjourn