

"We hesitate about where to go from here in space. Yet our delay in exploiting this window of opportunity could close off choices for our descendants if the no-growth paradigm - or a failure of nerve - should come to dominate the industrial nations. Because of our technologies, and the scales of our political and economic organizations, we now have the option of taking a conscious evolutionary step, expanding the presence and influence of humanity beyond the biosphere that evolved us - and possibly beyond the limits that otherwise would constrain our future."

Michael Michaud Life in the Universe

## **AGENDA**

Date	Time	Event
Nov. 13 (Sunday)		Pre-Symposium Activities
	2:30 - 7:00	<b>Delegate Registration</b> Waikoloa Promenade
	3:00 - 5:00	<b>Pre-Summit Organizational Meeting</b> <i>Kona IV</i>
	6:30 - 8:00	Delegate Reception  Lagoon Lanai

<u>Date</u>	Time	Event
Nov. 14 (Monday)	7:00 - 3:00	Delegate Registration Waikoloa Promenade
	7:00 - 8:00	Continental Breakfast Lagoon Lanai
		OPENING CEREMONIES Kona IV
	8:00 - 8:30	Welcome
		Mr. Jim Crisafulli Director, Hawaii Office of Aerospace Development
		Dr. Donald Straney Chancellor, University of Hawaii at Hilo
		Senator Will Espero, Rep. Angus McKelvey Hawaii State Legislature
		Dr. Osamu Odawara Chair, Pacific International Space Alliance (PISA - formerly JUSTSAP)
	8:30 - 9:00	The ILRP Vision and Summit Overview
		Dr. Frank Schowengerdt Director, Pacific International Space Center for Exploration Systems
	9:00 - 10:00	Keynote Presentations
		NASA Research Park: Partnerships for Innovation and Entrepreneurship in Space
		Mr. Michael Marlaire Director NASA Research Park
		Awakening the Spirit of Exploration for Human Development
		Mr. Henk Rogers Chairman Avatar Reality Inc.
	10:00 - 10:30	Refreshment Break and Group Photo Grand Staircase

Date	Time	Event	
Nov. 14	10:30 - 12:00	PLENARY Kona IV	SESSION I
		Panel Pres	sentation: ar Missions and Visions
		Key Topics:	Overview of ongoing/planned programs supporting lunar exploration, including analog test site activities.
		Moderator:	Mark Nall, NASA Marshall Space Flight Center
			Clive Neal, University of Notre Dame Alex Hall, Google Lunar X-Prize Kuniaki Shiraki, Japan Aerospace Exploration Agency (JAXA) Bob Richards, Moon Express - GLXP Jerry Sanders, NASA Johnson Space Center
	12:00 - 1:30	<b>Lunch</b> Kona V	
		Guest Spea	ker: Ms. Alex Hall Senior Director, Google Lunar X-Prize
		•	Google Lunar X PRIZE – ing Commercial Lunar Exploration a Reality
	1:30 - 3:15	PLENARY Kona IV	SESSION II
		Panel Pres	sentation: rrestrial Prototype - Form, Function & Build-Out
		Key Topics:	Goals/approach; elements of the terrestrial prototype; timeline; support from the ILRP consortium.
		Moderator:	John Hamilton, PISCES
			Dan Rasky, NASA Space Portal Robert Kelso, NASA Johnson Space Center Shigeru Aoki, Shimizu Corporation Dale Boucher, NORCAT Mitsuru Ohnishi, Japan Aerospace Exploration Agency (JAXA) Bill Larson, NASA Kennedy Space Center Tetsuji Yoshida, CSP Japan, Inc.

<u>Date</u>	Time	Event	
Nov. 14	3:15 - 3:30	Refreshment Break Kona Promenade	
	3:30 - 5:15	PLENARY SESSION III Kona IV	
		Panel Presentation: Building Strategic Alliances for Implementation Key Topics: Engaging government/industry/academia, making it massively participatory, multinational partnerships.	
		Moderator: Michael Marlaire, NASA Research Park	
		Panelists: Mark Spence, Hawaiian Airlines Jack Fox, NASA Kennedy Space Center Bruce Pittman, NASA Space Portal Christian Anderson, PISCES Maki Niihori, Japan Aerospace Exploration Agency (JAXA) Joe Ferraro, Ferraro Choi and Associates, Ltd. David Heck, The Boeing Company	
	5:15 - 6:30	Open Time	
	6:30 - 9:00	Networking Reception/Dinner Kona Promenade/Kona V	
		Guest Speaker: Mr. Robert Kelso  Manager, Lunar Commercial Services  NASA Johnson Space Center	

Topic: ISRU as an Integrating Theme for an ILRP

<u>Date</u>	Time	Event	
Nov. 15 (Tuesday)	7:30 - 8:30	Registration / Continental Breakfast Waikoloa Promenade / Lagoon Lanai	
	8:30 - 10:00	PLENARY SESSION IV Kona IV	
		Panel Presentation: Establishing the Value Proposition	
		Key Topics: Discussion of ILRP Value Proposition elements, including defining the customer base and its perceived unmet needs; unique products and services offering; economic and societal benefits; etc.	
		Moderator: Dan Bland, JAMSS America Inc.	
		Panelists: Lynn Harper, NASA Space Portal Henk Rogers, Avatar Reality Inc. Elaine Thorndike, Colorado Assoc. for Manufacturing & Technology Chris Pestak, Battelle Memorial Institute Frank Schowengerdt, PISCES Larry Clark, Lockheed Martin Space Systems Dallas Bienhoff, Advanced Space Programs	
	10:00 - 10:15	Refreshment Break Kona Promenade	
	10:15 - 12:00	<u>PLENARY SESSION V</u> Kona IV	
		Panel Presentation: International Perspectives on Space Exploration	
		Moderator: Dr. Osamu Odawara, Tokyo Institute of Technology	
		Panelists: Dr. Kuniaki Shiraki Special Counselor, Human Space Systems & Utilization Directorate & Former Executive Director - Japan Aerospace Exploration Agency (JAXA) Topic: JAXA's Vision for Space Exploration	
		Dr. Zhumabek Zhantayev  President, National Space Agency of the Republic of Kazakhstan	
		Topic: Present Activities and Future Plans for Kazcosmos	
		Mr. Susumu Yoshitomi Special Counselor, Japan Space Forum	
		Topic: JAXA Leadership of the Asia-Pacific Regional Space Agency Forum (APRSAF)	
		Ms. Julie Rottier Foreign Affairs Officer, U.S. Department of State U.S. Rep., U.N. Committee on the Peaceful Uses of Outer Space	
		Tania: Paranastivas from COPLICS	

Topic: Perspectives from COPUOS

Date	Time	Event	
Nov. 15	12:00 - 1:30	Lunch Kona V	
		Guest Speaker: Mr. Raymond French Integration Manager, Lunar Mapping & Modeling Project NASA Marshall Space Flight Center	
		Topic: Lunar Mapping and Modeling – Your Portal to the Moon	
		WORKING GROUP SESSIONS: PROTOTYPE DEVELOPMENT	
		The purpose of each working group session is to address specifics concerning "how" the ILRP prototype could be developed, with an emphasis on creating and selling the value proposition (e.g., refining requirements; expanding participation; leveraging commonalities; formulating cost-effective and sustainable implementation strategies; facilitating cooperative utilization; marketing to governments, industry and academia).	
	1:30 - 3:15	WORKING GROUP SESSION 1	
		WG1: Red Team (Kona IV)  Focus: Scientific research, technology prototyping and support infrastructure.  Co-Leads: Dan Rasky, Bill Larson	
		WG2: Green Team (Kona I)  Focus: Education and community outreach.  Co-Leads: John Hamilton, Henk Rogers	
		WG3: Blue Team (Kona II & III)  Focus: International/public-private partnerships and related business/marketing/funding strategies.	
		Co-Leads: Michael Marlaire, Chris Pestak	
	3:15 - 6:30	Open Time	
	3:30 - 5:30	PISCES Advisory Board Meeting Kona I	
	6:30 - 9:00	Networking Reception/Dinner Kona Promenade/Kona V	
		Guest Speaker: Dr. S. Alan Stern Director, Florida Space Institute - Kennedy Space Center Chief Scientist, Moon Express	

Topic: Lunar Exploration and Utilization – Version 2.0

Date	Time	Event	
Nov. 16 (Wednesday)	7:30 - 8:30	Registration / Continental Breakfast Waikoloa Promenade / Lagoon Lanai WORKING GROUP SESSION 2	
	8:30 - 10:15		
		WG1: Red Team (Kona IV)  Focus: Scientific research, technology prototyping and support infrastructure.  Co-Leads: Dan Rasky, Bill Larson	
		WG2: Green Team (Kona I)  Focus: Education and community outreach.	
		Co-Leads: John Hamilton, Henk Rogers  WG3: Blue Team (Kona II & III)	
		Focus: International/public-private partnerships and related business/marketing/funding strategies.  Co-Leads: Michael Marlaire, Chris Pestak	
	10:15 - 10:30	Refreshment Break Kona Promenade	
	10:30 - 12:00	WORKING GROUP SESSION 3	
		WG1: Red Team (Kona IV)  Focus: Scientific research, technology prototyping and support infrastructure.  Co-Leads: Dan Rasky, Bill Larson	
		WG2: Green Team (Kona I)  Focus: Education and community outreach.  Co-Leads: John Hamilton, Henk Rogers	
		WG3: Blue Team (Kona II & III)  Focus: International/public-private partnerships and related business/marketing/funding strategies.  Co-Leads: Michael Marlaire, Chris Pestak	
	12:00 - 1:30	Lunch Kona V	
		Guest Speakers: Dr. Daniel Rasky  Director, NASA Space Portal	
		Mr. Bruce Pittman Chair, AIAA Commercial Space Group	

Topic: Public-Private Partnerships as Portals to the Future

Date	Time	Event		
Nov. 16	1:30 - 3:15	WORKING GROUP SESSION 4		
		WG1: Red Team (Kona IV)		
		<b>Focus:</b> Scientific research, technology prototyping and support infrastructure.		
		Co-Leads: Dan Rasky, Bill Larson		
		WG2: Green Team (Kona I)		
		Focus: Education and community outreach.		
		Co-Leads: John Hamilton, Henk Rogers		
		WG3: Blue Team (Kona II & III)		
		<b>Focus:</b> International/public-private partnerships and related business/marketing/funding strategies.		
		Co-Leads: Michael Marlaire, Chris Pestak		
3:15 - 3:3	3:15 - 3:30	Refreshment Break Kona Promenade		
	3:30 - 4:30	<b>Special Presentation</b> Kona IV		
		Guest Speaker: Mr. Jon Lomberg International Space Artist		
		Reaching for the Cosmos:		
		The Legacy of Carl Sagan & Galaxy Garden		
	4:30 - 6:30	Open Time		
	6:30 - 9:00	Networking Reception/Dinner Kona Promenade/Kona V		
		Guest Speaker: Astronaut Kimiya Yui  JAXA Astronaut Group/NASA Astronaut Office-JSC		
		Topic: The Moon Challenge		

<u>Date</u>	Time	Event
Nov. 17 (Thursday)	7:30 - 8:30	Registration / Continental Breakfast Waikoloa Promenade / Lagoon Lanai
		PLENARY SESSION VI Kona IV
	8:30 - 10:00	Integration of Working Group Recommendations Reports from Working Group facilitators on individual group sessions, followed by an open discussion to consolidate the recommendations from all working groups into the ILRP Strategic Plan.
		Moderator: Dr. Frank Schowengerdt  Director, PISCES
	10:00 - 11:45	Post-Summit Coordination Meeting Kona IV
	12:00 - 1:30	<b>Lunch</b> Kona V
		Guest Speaker: Mr. Dennis Wingo CEO, SkyCorp
		Topic: The Philosophy of the Economic Development of the Solar System – How Hawaii can help Lead the Way
		CLOSING CEREMONIES Kona IV
	1:30 - 2:00	Advisory Committee Report  Dr. Frank Schowengerdt  Director, PISCES
	2:00 - 3:00	Next Steps in Implementing the ILRP Terrestrial Prototype  Open Delegate Discussion
	3:00 - 5:00	Open Time
	5:00 - 9:30	Sunset Dinner Buddha Point
		Summit Concludes