All Times are Arizona Time (MST / PDT)	**Day 1 - Thursday October 20th**				
	Morning Plenaries - *Arizona Ballroom*				
9:00 AM	Dr. Robert Zubrin - Opening Remarks				
9:30 AM	Dr. Jim Bell - Postcards from Mars: Curiosity & Perseverance Mission Update				
10:00 AM	Dr. Marcia Rieke - The Webb Telescope's First Months: A Treasure Trove of Results				
10:30 AM	Dr. Vandi Verma - Mars Rover Operations and Role of Autonomy and Humans in Sample Return				
11:00 AM	Dylan Taylor - NewSpace 2025: How the Space Industry will Likely Evolve in the Next Few Years				
11:30 AM	Steven A. Benner - The Case for Extant Life on Mars				
12:00 PM	**Lunch Break (12pm - 1pm)**				
	Afternoon Track Sessions				
	Special Presentations *Arizona Ballroom*	**Political & Legal**	**Tech R&D A**	**Medical**	**Virtual Presentations** *(Online only)*
1:00 PM	Jan Spacek - ALFA Mars: Finding Extant Life on Mars Before Humans Arrive	Fabara, Lopin et. al. - The Martian Republic - A governance system for Mars	Libby Hubbard, EdD - Building Earth Arcologies as Precursors to Mars Colonies	Dr. Tamara Pack - Astro-Psychiatry: Mental Health & Space Exploration	Akhilesh Jhawar - Design of a Lambda Based Suspension for Space Missions (V)
1:30 PM	Miroslav Rozloznik - Underwater Analog Space Missions (V)	Nina Kojima - Ethics in Extraterrestrial Nanotechnology	Grant Strem - Direct "Air" Capture of CO2 using Humidity Swing Adsorption on Mars	Harley Jackson - Comparative Behavior of E. coli Cultured in Simulated Microgravity or Earth Gravity	Alejandro Salinas-Téllez - Crop Production for LD Space Missions (V)
2:00 PM	Jacek Wyszyński - Occupy Mars: The Game (V)	Lauer & Earnshaw - The Martian Papers: Stewardship of the Planet	Colin A Lennox - Harvesting Rare Earth Elements using Bioreactors	Barnabas Pasztor - Food and Nutrition Plan for Spaceflight to Mars	Alessandra Calanchi - Heretical Science and an Interplanetary Human Race (V)
2:30 PM	*NOTHING SCHEDULED (Room Prep Time)*	Kieran Griffith - What Manned Mars Exploration Needs is Competition	Patrick Selby - When will humans go to mars?	Susan Ip-Jewell - HOLOTRIAGE: A VR Sim for Medical Training	Sumanarathna - A Feasibility Study of Space Tourism using Augmented Reality (V)
3:00 PM	**Peter Beck - CEO, Rocket Lab (V)** *Arizona Ballroom*				
3:30 PM					
4:00 PM	James Burk & Jeff Rayner - Mars VR & Field Science Demos	James Gilley - The Martian Papers: A Case for a Sovereign Mars	Jie Xu - Tapping water reservoirs hidden in hydrate minerals	M. Turner - Organization of Gravity on the Functional Movements of the Human Body	Art Harman - Politics, Mars and YOU (V)
4:30 PM	Dr. Shannon Rupert - Education Initiatives at MDRS	Christian Lewis - Trajectories for the Human Exploration of Mars and Ceres	Douglas Hamilton - Software to Calculate a Mission's Medical Mass, Power and Volume	Emmy Jewell - MEDINAUT -The Flying "Da Vinci" Telerobotic-Telesurgical Drone-Rover	Davey Sapinski - Interstellar Education Foundation (V)
5:00 PM	Panel on MDRS Analog Suits - Davis, Reed, Kuznetz, Burk (Moderator)	Edward Heisler - A military war will China will prevent the human settlement of Mars	Carl Greenbaum - METHALOX Propellant Production Demonstration System	William Gardiner - Long Duration Space Flight Using Nutrition Plans	David Nordling - Low-Gravity Orbiting Centrifuge Manned Habitat (V)
5:30 PM	Pooja Kasiviswanathan - Farming on Mars (V)	Dr Joseph Michalski - Analysis of China's Space Program (V)	Gary Johnson - Engineering Lander/Rover for Mars	Douglas Hamilton - Astronauts and their Biomes for a Mars Mission	Scott Balcao - Radiation Effects on Plants in Space Flight (V)
	Dinner Break (6pm - 7pm)				
	Thursday Evening Program				
7:00 PM	Public Event at ASU: **Search for Life on Mars Panel** (Arizona Ballroom) Robert Zubrin, Steven Benner, Jan Spacek, Jim Bell				
7:30 PM					
8:00 PM					
8:30 PM					

All Times are Arizona Time (MST / PDT)	**Day 2 - Friday October 21st**				
	Morning Plenaries - *Arizona Ballroom*				
9:00 AM	Dr. Jan Millsapps - Model Mars				
9:30 AM	Dr. Greg Autry - Artemis and the Moon as a capabilities building destination for Mars				
10:00 AM	Dr. William Bianco - Russia & The Limits of Global Space Cooperation				
10:30 AM	Dr. Bhavya Lal, Associate Director, NASA - Nuclear Propulsion for Mars				
11:00 AM	Pamela Melroy - Deputy Administrator, NASA - The Human-Machine Teaming Path to Get Us There				
11:30 AM	Dr. Ezinne Uzo-Okoro, Asst. Dir., Space Policy, The White House - In-Space Capabilities for Mars & Beyond (V)				
12:00 PM	**Lunch Break (12pm - 1pm)**				
	Afternoon Track Sessions				
	Special Presentations *Arizona Ballroom*	**Analog Research & Facilities**	**Tech R&D B**	**Permanent Settlement**	**Virtual Presentations** *(Online only)*
1:00 PM	James Burk - The Mars Society: Programs & Initatives	Ashley Kovalsky - SIRIUS-21 crew member	Doug Plata - The Artificial Gravity Prescription for Mars	Frank Schubert - Construction on Mars (What it will take)	Collier-Wright & Bögel: Magnetoplasmadynamic Thrusters (V)
1:30 PM	James Melton - Mars Society Ambassador Program	*Open Slot*	Jason Evans - MarsXR Hazard Management System (HMS)	Stellie Ford - Feeding a Colony: ISRU in early space habitats	Julio Rezende - Underwater activities in Space Analog Station Habitat Marte (V)
2:00 PM	*Ambassador Presentations:* Roger Gilbertson Garland Rush Others TBD	Gary Johnson - Suits and Hab Atmospheres	John Parks - Interplanetary Application of Ecological Learning:	Daniel Ives - Biological-age control to maximise the settlement-rate of new	Francis Desilets-Mayer - In-situ production of rocket propellant on Mars using the Sabatier reaction: a
2:30 PM		Wayne L. White - The South Pole and Mars	Donald Jacues - In Search of Biological Life Support	Richard L Poss - Mars the New World: Reflections on the 500 Year Metaphor	Cynthia Hills - Living With Children on Mars (V)
3:00 PM	Kent Nebergall - Accelerate Like Elon 2022: Updated Methodologies	Jason Simpson - Digital EVA Tracking for MDRS	Holger Isenberg - 24 Color Cameras to answer "Red or Blue Sky on Mars?"	John Brandenburg - Past Events that may have Devastated the Planet	James Secosky - What have we found on Mars? (V)
3:30 PM	Michael Helton & Dimitrie Grigorescu - The Expansion Effect	Kristen Miller - AARG: Developing a Program for Student Research and Leadership	Carl Greenbaum - Helicopters for Analyzing Metabolism and DNA	Stuart Nelson - Community Building System for Mars and Earth	Jim Pass - The "Astrosociology in the Classroom" Program: Contributions of Social-
4:00 PM	Jayden Sage - The Martian Economy	Will Green - MarsSuits, An Overview of the Technology Needed for Martian EVAs	Eric Robinson - Hydrogen Powered Hypersonic Launch Colonize Mars	Gonzalo Munevar - Some Scientific Challenges in the Exploration of Mars	Jim Plaxco - How Not to Design a Martian Economy (V)
4:30 PM	Mackenzie & Lutz - Mars University Planning and Focus Group (V)	Susan Ip-Jewell - A New Analog Facility for Training "SPACE MEDICS" Astronauts	Lev Reznikov - Hi-Energy Impact Engineering	Doug Plata - Meteorites for Early Metals on Mars	Joshua Sparber - Parameters of Life (V)
5:00 PM	Don Lefevre - Companion Dogs in Space?	Scott Balcao - Mountaineering: An Analog for Human Space Training (V)	Gary Johnson - Orbital Propellant Depot	Robert Mills - Surviving and thriving for 5–10-years	Julia Alvarez Vallero - A potential solution to deal with charged particles on Mars (V)
5:30 PM	Paul R. Kan - Buzzed Lightyear: Tapping Into Beer's Interplanetary Future	Julio Rezende - Brazilian Mars Analog Simulant (V)	Mackenzie - Analog Mars Settlement (V)	Doug Plata - Full Self-reliance 15 Years Sooner	Sam Ross - Syrtis: A new tool for habitat thermal analysis (V)
	Friday Evening Programs				**Virtual Presentations**
6:00 PM	**Reception** at ASU NewSpace Dept (ISTB4) Plus Tours of ASU Space Exhibits				Balcao - Polar Expeditions as Case Studies (V)
6:30 PM					Sudharsanam - Exploration with an Ethical Stance (V)
7:00 PM			**Live Music Event** (21+) - F. Shubert & TBD Local Act - Last Exit Live (downtown PHX)		Sridharan - Robotics For Off-World Construction (V)
7:30 PM			Transportation will depart from ISTB4, and return to area hotels approx 10pm		Manousos Chairetis - Power Space Peace (V)

All Times are Arizona Time (MST / PDT)	**Day 3 - Saturday October 22nd**				
	Morning Plenaries - *Arizona Ballroom*				
9:00 AM	Dr. Albert Haldemann - ExoMars Chief Engineer (V)				
9:30 AM	Dr. Jekan Thanga & Dr. Sergey Shkarayev				
10:00 AM	Dr. Jim Green - Former NASA Chief Scientist				
10:30 AM	IMM Team 2 - N.E.W. E.R.A. Mars Mission Proposal				
11:00 AM	International Mission to Mars (IMM): Mars Society's Engineering Design Course & Competition for High Schoolers				
11:30 AM	Dr. Kris Zacny - Future of Robotic Mars Exploration				
12:00 PM	**Lunch Break (12pm - 1pm)**				
12:30 PM					
	Afternoon Track Sessions				
	Telerobotic Competition *Arizona Ballroom*	**Humanity's Future**	**Tech R&D C**	**Student Competitions**	**Virtual Presentations** *(Online only)*
1:00 PM	*Telerobotic Competition Finalists*	Erik Bethke, CTO - Million on Mars game	Oleg Mansurov - History and Future of Russian space programs to Mars	IMM Team 3 - Polemos I: The Foundation for the Future of Mars Exploration	Mikolaj Sobocinski - Invincible Games & Omnipresent Simulations (V)
1:30 PM	*Telerobotic Competition Finalists*	Michael Laine - Starship Singularity	Jason Achilles Mezilis - The Future of Sound on Mars	IMM Team 1 - Valles Marineris Exploration Mission	Hussain - Hybrid Power Generation Method (V)
2:00 PM	*Telerobotic Competition Finalists*	Charles Letherwood - The Mars Leap: Putting YOU on Mars	Dr. Peter Swan - Massive Lift to Mars Everyday as fast as 61 Days Delivery	IMM Team 5 - Ares-1: A Student-Designed Mars Mission	Manjunatha - SLS ARYA (ಅಕ್ಷಿತ ಆರ್ಯ) - Heavy Lift Rocket Architecture (V)
2:30 PM	*Telerobotic Competition Finalists*	Stellie Ford - Decentralized Funding for Public Access to Space	Richard L Poss - Mars the New World: Reflections on the 500 Year Metaphor	*IMM Team 6*	Bary Maxime - Building a pressurized dome on Mars (V)
3:00 PM	*Telerobotic Competition Finalists*	Alexander Shenderov - Homo Exploratoris	Scott Van Hoy - Observing Facial Emotion Recognition Accuracy and Psychological Health	Trudi Hoogenboom - Martian Greenhouse Project (V)	Priscilla Chase Thomas - Womens Contributions to Our Push for the Stars (V)
3:30 PM	*Telerobotic Competition Finalists*	James Gilley - Resource Conflict and Great Power Politics in Space	Gary Johnson - "Starship" at Mars	*Martian Greenhouse Student Presentations (V)*	Mackenzie - Bio-Plastic Mars Habitat (V)
4:00 PM	*NOTHING SCHEDULED (Room Prep Time)*	Brandenburg - A Scenario Where a Mars Colony Saves Humanity	Douglas Shull - Lunar Lava Tube Bases for Telescopes (V)	*Martian Greenhouse Student Presentations (V)*	Cambise - Modular Radiation-Resistant Shell for Mars Habitat (V)
4:30 PM	*NOTHING SCHEDULED (Room Prep Time)*	Gary Johnson - Colonizing Mars	Christian Lewis - Trajectories for the Human Exploration of Mars and Ceres	*Martian Greenhouse Student Presentations (V)*	Eddie Zhuang - Caution! This is not a meteor shower! (V)
5:00 PM	*NOTHING SCHEDULED (Room Prep Time)*	Kent Nebergall - Independence – Mapping a Multi-Planet Species	M K Borri - Rover Fleet Design (V)	Bob Barboza - Planning for the First School on Mars (V)	Sudharsanam - Exploration: Voyage to find a life (V)
5:30 PM	*NOTHING SCHEDULED (Room Prep Time)*	Frank Moreno - Martian transhumanism (V)	Vadym Romanko - Ice base (V)	Vatasta Koul - Human Desire to Explore Mars (V)	Art Harman - Space Race or Space War? China, Russia and the Free World (V)
	Saturday Evening Program				
6:00 PM	**Saturday Banquet** (Special Guest Speaker and Awards Ceremony)				
6:30 PM					
7:00 PM					
7:30 PM					

All Times are Arizona Time (MST / PDT)	**Sunday October 23rd**
	Morning Plenaries - *Arizona Ballroom*
9:00 AM	Dr. Jingnan Guo, The University of Science & Technology of China (V)
9:30 AM	Sabine Heinz - Space Renaissance International - Art on Mars (V)
10:00 AM	Maria Perino - Thales Aerospace Italy (V)
10:30 AM	Kai Staats - Mars Analog and Research Station at Biosphere 2
11:00 AM	Alfredo Munoz - The Off-World Metaverse: Digital Simulation of Martian Settlements
11:30 AM	Sergey V. Ushakov - CALPHAD-Assisted Thermal Analysis for water-free production
12:00 PM	Dr. Stefano Nerozzi - International Mars Ice Mapper Measurement Project
12:30 PM	Maraia Tanner - Star Harbor Academy
1:00 PM	Dr. Jonathan Clarke - Mars Analogue Research Station for Australia (V)
1:30 PM	Dr. Robert Zubrin, Closing Remarks
2:00 PM	**End of Conference**

		Art Harman - Space Race or Space War? China, Russia and the Free World (V)		