

2021 PROGRAM SCHEDULE



Crowdcast Opens 7:30 am PST
Welcome Comments 7:30 - 8:00 am

Opening Keynote - The Raymer Manned Mars Plane
Dr. Dan Raymer | 8:00 - 9:00 am

Transition Break | 8:55 am

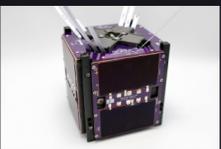


How to Land on Mars
Dr. Dieter Zube | 9:00 am

Inventing the Fluidic Propulsive System
Dr. Andrei Evulet | 9:00 am



Transition Break | 9:25 am

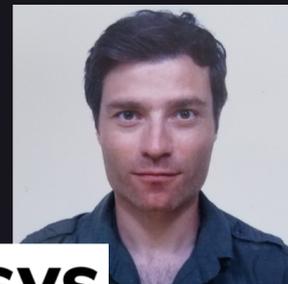


OreSat: Update on Oregon's First
Satellite and a Modular Open Source
CubeSat System
Andrew Greenberg, Emma Levy, and
Hayden Reinhold | 9:30 am

Aviation Keynote
Challenges of designing Hypersonic Vehicles
Dr. Swati Saxena & Dr. Valerio Viti | 9:30 am



Engineering Risk Management and the
Conspiracy of Optimism
Richard Abbott | 10:00 am



Transition Break | 10:25 am



Accelerating Innovation and Reducing
Risk in Aerospace Industry Using Theory-
guided Machine Learning
Dr. Navid Zobeiry | 10:30 am

Electrification Challenges for Aircraft
Rodney Mack | 10:30 am



Transition Break | 10:55 am

Main Keynote - The Case for Space:
How the Revolution in Spaceflight Opens a Future of Unlimited Possibilities
Dr. Robert Zubrin | 11:00 am - 12:00 pm



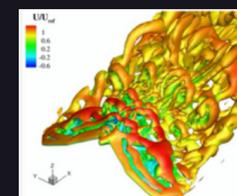
Lunch Break | 11:55 am - 12:30 pm



Looking for Life on Mars: NASA's Mars
Perseverance Rover and Ingenuity
Helicopter
Tony Gondola | 12:30 pm

Trivia Session | 12:30 pm
Transition Break | 12:55 pm

Bio-inspired Intelligent and Green Flying Vehicles
Dr. Rajeev Jaiman, Aarshana Parekh, Amir Chizfahm,
Rachit Gupta, and Shayan Heydari | 1:00 pm



Transition Break | 1:25 pm

Space Keynote
Exploring Blue Origin's Capabilities and
Technologies Including Flying Humans to Space
Dr. Yen Matsutomi | 1:30 pm



Implementation of Protection Against Common
Laser Threat to Pilots While Landing an Aircraft
Jagdish Madhav, PE | 1:30 pm



Transition Break | 1:55 pm

Digital Mission Engineering - The Integration of
Mission, System, Physics and Cost Models for
Decision Making
Andy Ko | 2:00 pm

Transition Break | 2:25 pm



Enabling Smart Spacecraft: Towards a
New Mental Model for Deploying
Compute and Software in Space
Dr. Andrew "Kit" Kennedy | 2:30 pm

Carbon Fiber Space Frame Architecture
for Aerospace Structures
Dr. Mahesh Chengalva | 2:30 pm



Riona Armesmith
Closing Keynote 3:00 - 4:00 pm

Closing Remarks 4:00 - 4:15 pm