Virtual Event



## PNW AIAA PRESENTS 2021 TECHNICAL SYNPOSIUM

NOV 6, 2021 Event Begins at 7:50 AM (PST)

Mid-Day Highlights

## The Case for Space: How the Revolution in Spaceflight Opens a Future of Unlimited Possibilities

Dr. Robert Zubrin - President, Pioneer Astronautics

Noon Keynote 11 - <u>12 PM</u>



Robert Zubrin is a world-renowned astronautical engineer and President of Pioneer Astronautics. He holds Masters degrees in Aeronautics and Astronautics and a doctorate in Nuclear Engineering from the University of Washington. He is the inventor more than 15 US patents for technologies in the field of space propulsion, exploration, and energy, the author of over 200 published technical and non-technical papers in the field, as well as non-fiction books

Starting with a discussion of the present-day breakthroughs, we will take a deeper look at where it leads: to ultrafast global travel through suborbital space, to new industries on orbit, and to human settlement of the Moon, Mars, the asteroids, the outer solar system, and ultimately the stars. All these things are possible, and he will explain how to achieve them.

## **Electrification Challenges for Aircraft**

Rodney Mack - Sr. Director, Crane Aerospace



Aviation Track

10:30 - 11 AM

Space Track 10:30 - 11 AM



Sr. Director of Business Development Rodney Mack discusses how Crane Aerospace & Electronics addresses electrification challenges for achieving reduced/zero emissions for aircraft through Power Electronics, Power Distribution, Energy Storage and Thermal Management. Rodney joined Crane A&E in 1986 and is a pivotal part of maintaining their strategic relationships with Sensing and Power Systems customers.

Accelerating innovation and reducing risk in aerospace industry using theory-guided machine learning Dr. Navid Zobeiry - Asst. Prof, University of Washington

Explore three recent successful applications of TGML methods 1) to accelerate process analysis of large aerospace composite parts by 1,000 to 10,000 times greater than traditional finite element methods, 2) to enable real-time optimization of autoclave processing of composites for active manufacturing control, and 3) to accelerate characterization of material properties.

## Register at <a href="https://pnwaiaa.org/ts2021/">https://pnwaiaa.org/ts2021/</a>

