Title: Systems Engineering for IM's Lunar payload and Data Services (LPDS) Program

Presenters:
Dr. Timothy Crain, Intuitive Machines Vice President of Research and Development
Ben Reed, IBX Vice President of Engineering

Abstract: IM provides cradle-to-grave services in rapid and adaptive technology development, integration and testing, and operations for autonomous and resilient robotic space systems. NASA selected IM to support its new era of Lunar exploration by delivering five payloads (including 2 from GSFC) to the Moon on its Nova-C lander by Q4 2021, and to deliver the Polar Resources Ice Mining Experiment (PRIME-1) drill, combined with a mass spectrometer, to the Moon by Q4 2022. IM is developing a commercial LPDS program that provides transit to lunar orbit, intact payload delivery to the lunar surface, and data communications and power services to assets both in lunar orbit and on the surface. IM's Systems Engineering approach brings a healthy balance between traditional aerospace rigor and NextGen agility to decrease development time and cost while increasing the probability of success.