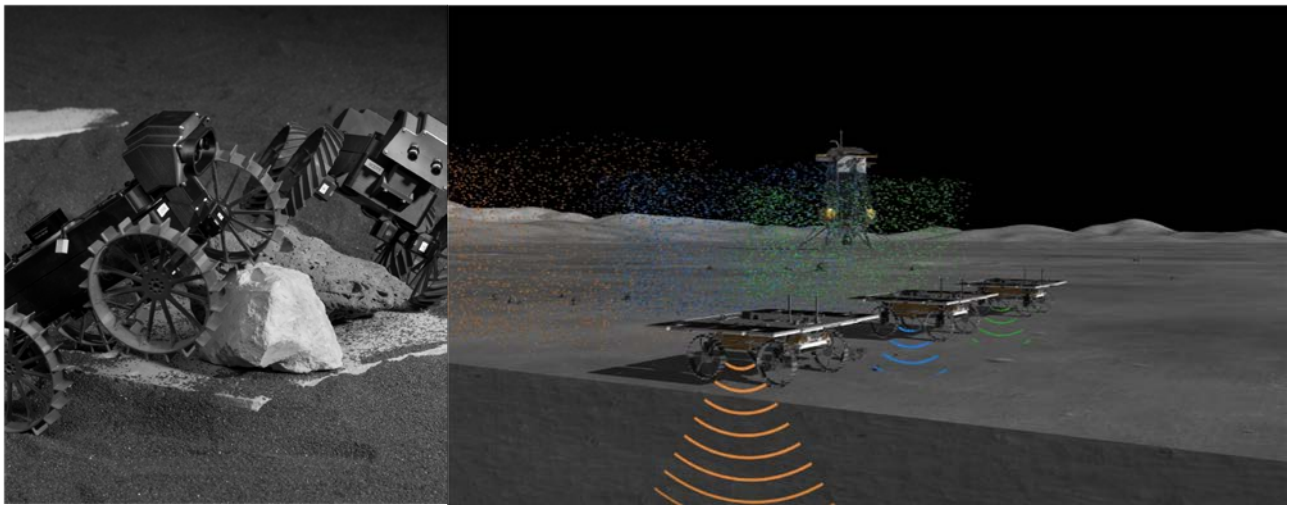
AIAA San Gabriel Valley Seminar

June 14, 2023 at 12 noon, PST

RSVP online: https://tinyurl.com/52wr7dw5



Cooperative Autonomous Distributed Robotic Exploration

Abstract: Cooperative Autonomous Distributed Robotic Exploration (CADRE) is a technology demonstration on its way to the moon via the Commercial Lunar Payload Service (CLPS) program in 2024. It will be a first of its kind demonstration of multi-agent autonomous rovers, featuring three fully autonomous, shoebox-sized rovers, performing a distributed measurement of the lunar surface and sub-surface with stereo cameras and a ground-penetrating radar. In this talk, we will provide an overview of the technology demonstration, as well as, a closer look at how the rovers will work autonomously together to plan and execute a distributed measurement.

About the Speakers:

Dr. Jean-Pierre de la Croix is a Robotics Systems Engineer in the Maritime and Multi-Agent Autonomy group at NASA JPL and is currently CADRE's principal investigator and autonomy lead. His research focuses on the application of multi-agent autonomy systems and algorithms to space exploration.

Subha Comandur is CADRE's Project Manager at NASA JPL. Subha has over twenty years of engineering and leadership experience at JPL and industry on various spacecraft missions including Mars Curiosity Rover, JUNO, and Soil Moisture Active Passive (SMAP).

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