



# Advanced Space

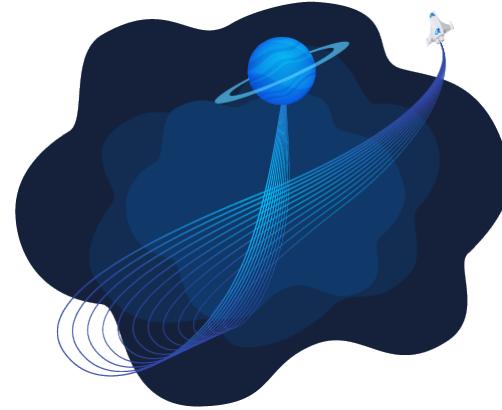
## Moon, Mars, and Beyond



Advanced Space exists to enable the sustainable exploration, development, and settlement of space



# Our Core Competencies

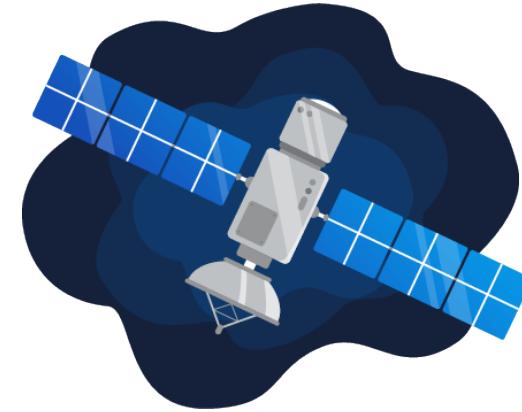
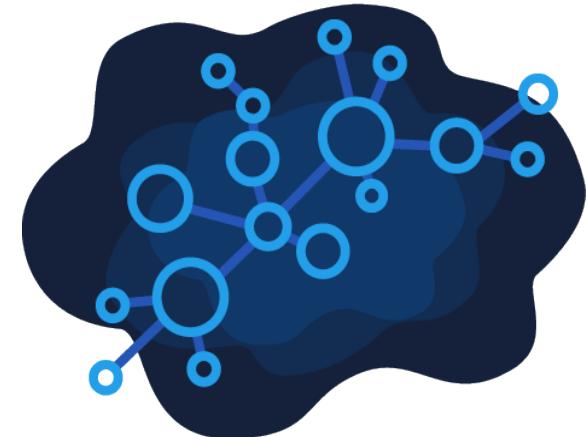


## Flight Dynamics

- ❖ We help people fly their spacecraft
- ❖ Specializing in:
  - ❖ Constellations
  - ❖ Electric Propulsion
  - ❖ Cislunar
  - ❖ Interplanetary

## Software Technology Development

- ❖ Autonomous spacecraft navigation
- ❖ Artificial intelligence, machine learning, & neural networks



## Rapid Turn-key Missions

- ❖ Integrated expertise
- ❖ Proprietary toolchains
- ❖ Systems engineering architecture for expedited analysis

# CAPSTONE

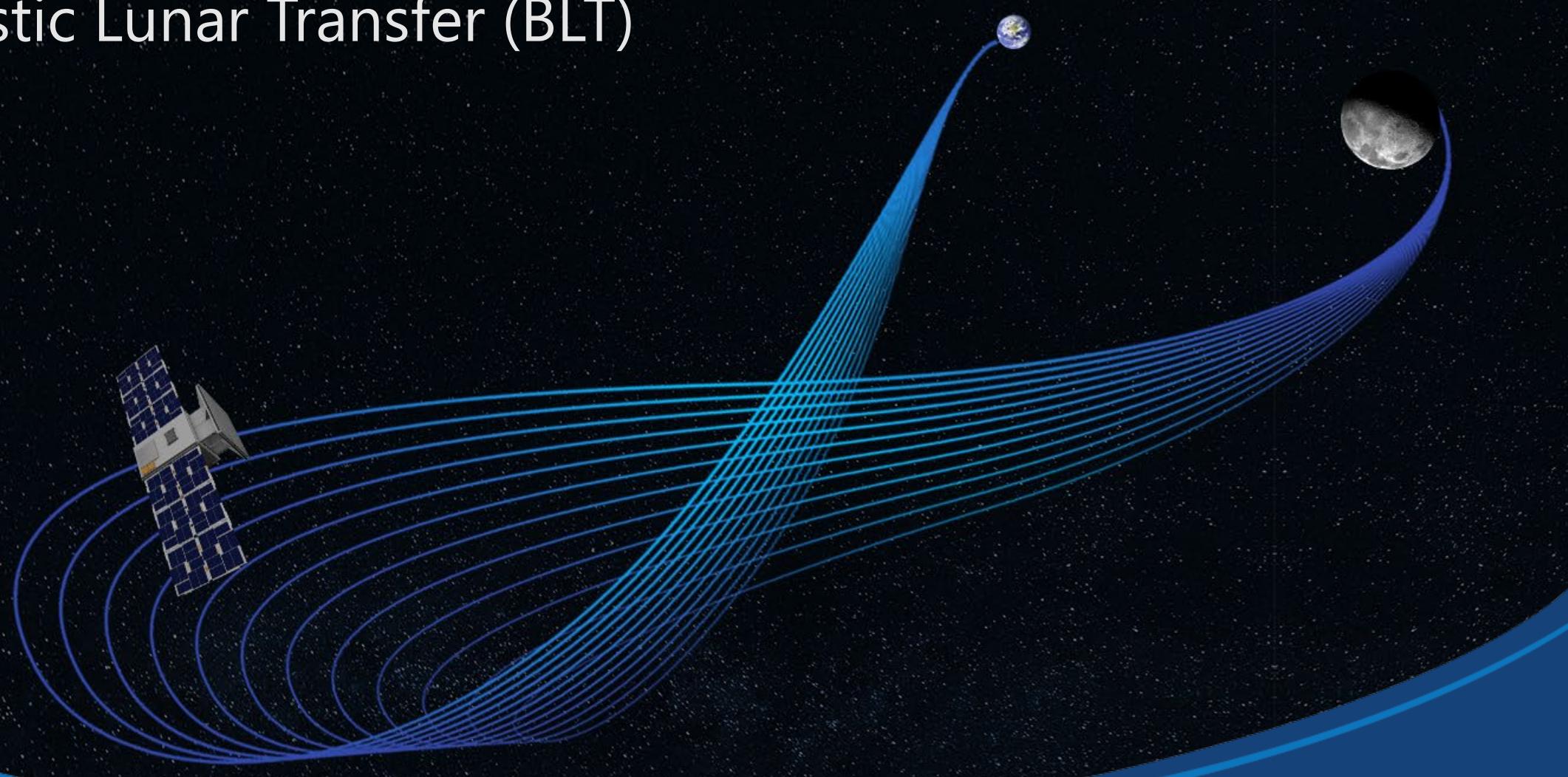
## Cislunar Autonomous Positioning System Technology, Operations, & Navigation Experiment

- ❖ Concept to Launch: ~33mo
- ❖ Launch: 28 June 2022
- ❖ Flight: ~4mo via low-energy Ballistic Lunar Transfer (BLT)
- ❖ Mission: ~18mo in orbit at the Moon
  - ❖ Completes 6mo primary mission this week!





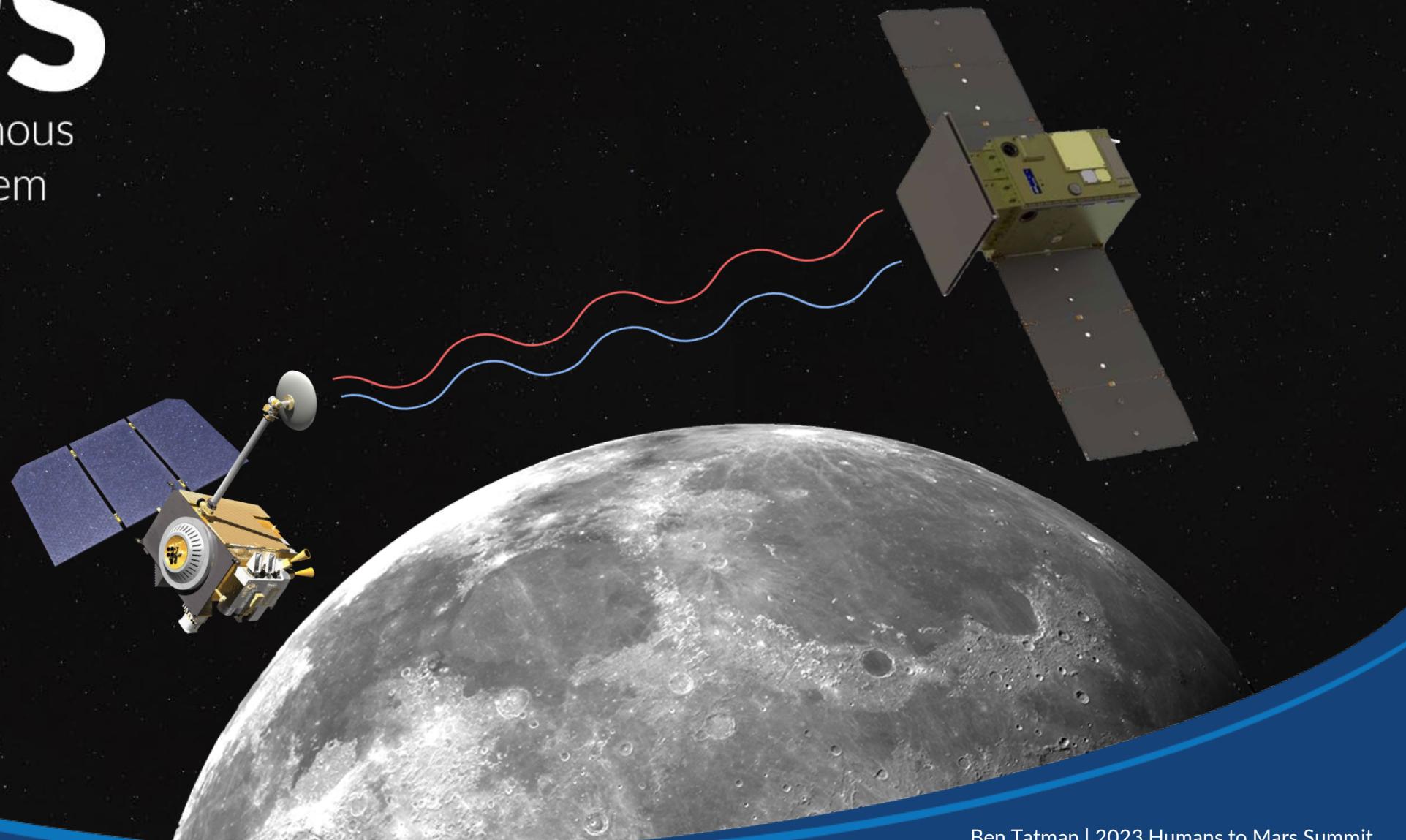
# Getting to the Moon Via Ballistic Lunar Transfer (BLT)





# CAPS™

Cislunar Autonomous  
Positioning System





# Moon to Mars

Lessons learned from missions at the Moon are not only proving grounds for technology but also for operational planning, long-term living in space environments, and more.



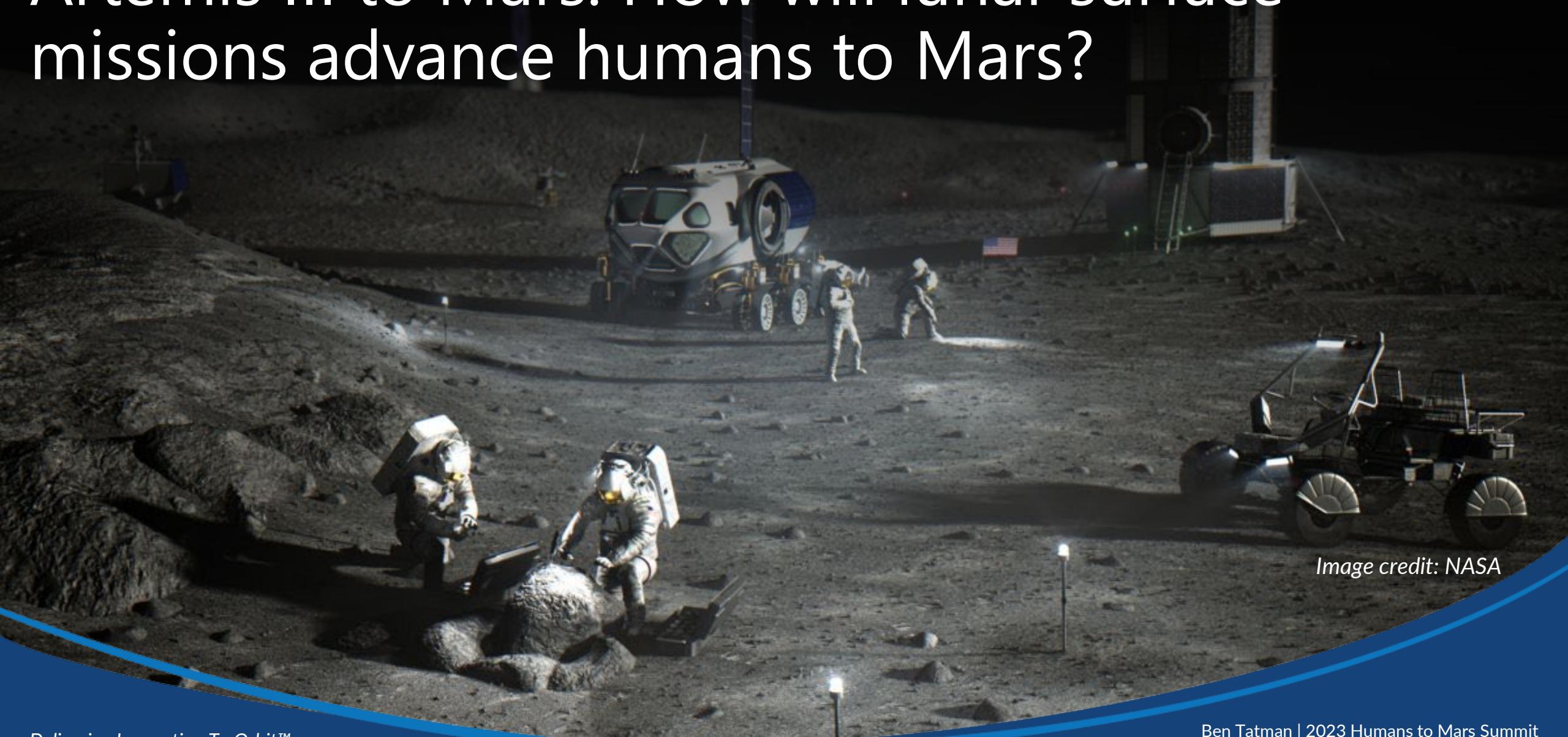
# Mars Expertise

## Supporting UC Berkeley on ESCAPADE

*Escape, Plasma, and Acceleration Dynamics Explorer*



# Artemis III to Mars: How will lunar surface missions advance humans to Mars?



*Image credit: NASA*