

# Establishing a University Community for Deep Space Exploration

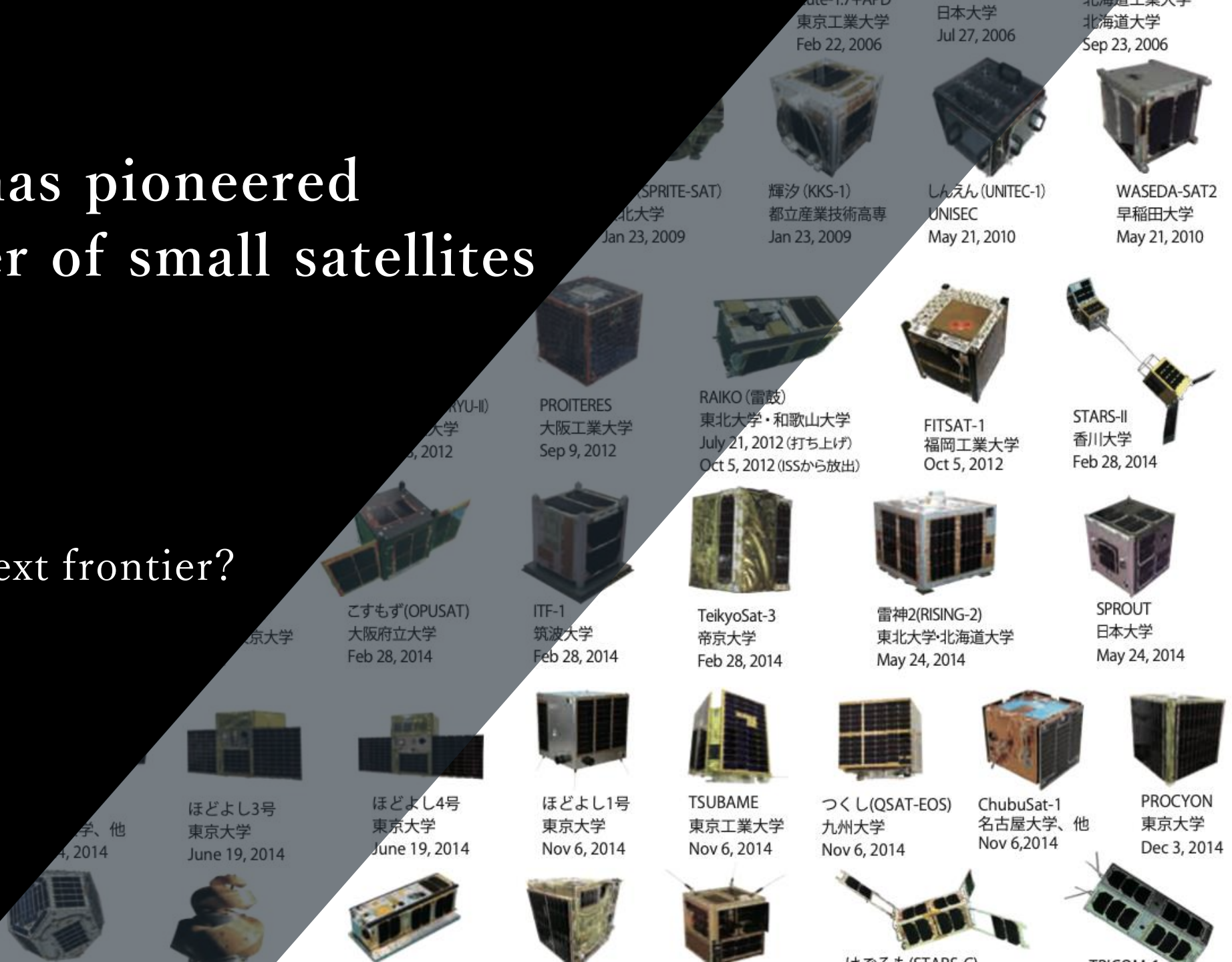
Hiroataka Sekine

The University of Tokyo



# UNISEC has pioneered the frontier of small satellites

Where is the next frontier?



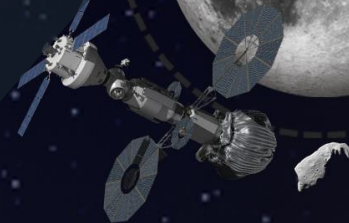
# The importance of deep space exploration is increasing

How about universities?

[www.nasa.gov](http://www.nasa.gov)

## LEARNING GROUND

MISSION: 1 TO 12 MONTHS  
RETURN TO EARTH: DAYS



Expanding capabilities by visiting an asteroid redirected to a lunar distant retrograde orbit

The next step: traveling beyond low-Earth orbit with the Space Launch System rocket and Orion spacecraft



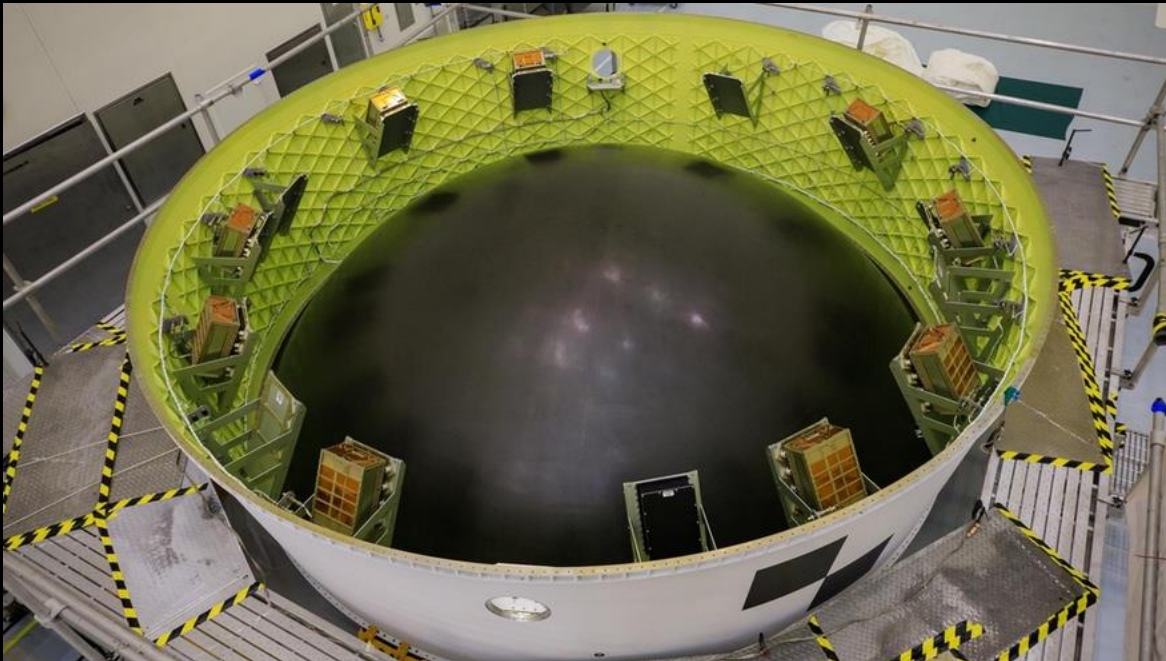
## MARS RESEARCH

MISSION: 2 TO 3 YEARS  
RETURN TO EARTH: YEARS



Developing planetary research capabilities by exploring Mars, its moons, and other deep space destinations

# University deep space exploration CubeSats



LunaH-Map

- Arizona State University

Luna IceCube

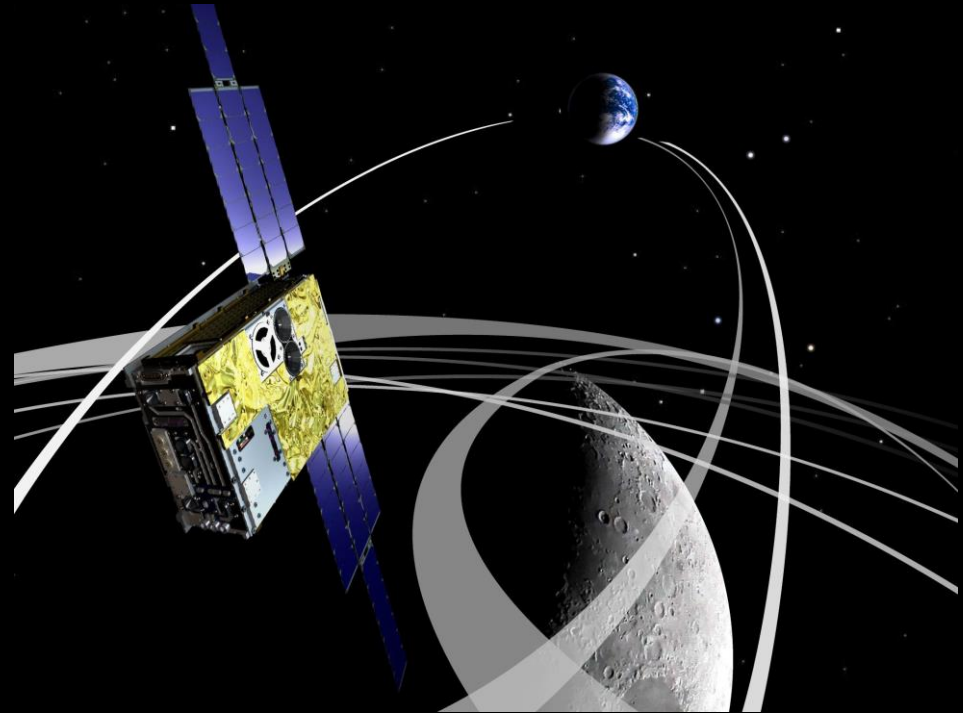
- Morehead State University

EQUULEUS

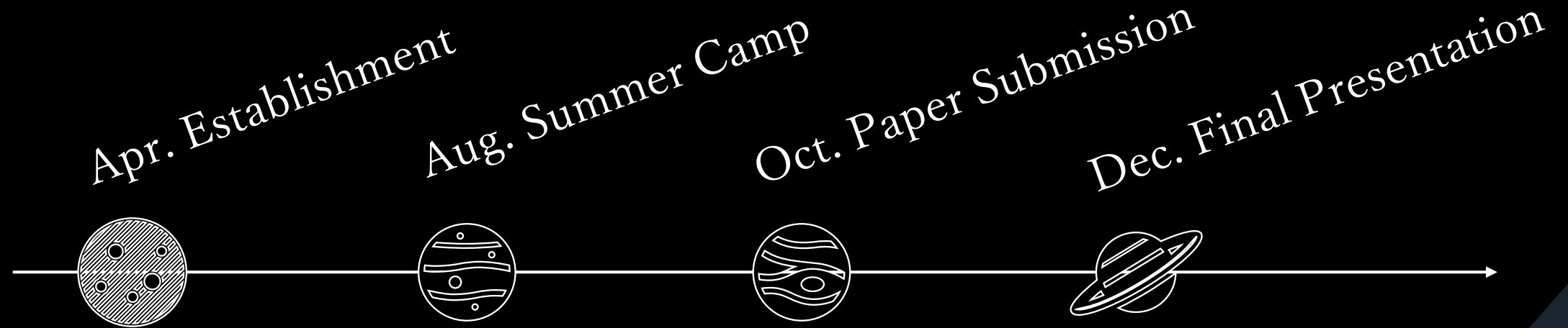
- The University of Tokyo

# Purposes of a University Community for Deep Space Exploration

1. Sharing experiences and information from a student's perspective.
2. Learning about deep space exploration from professionals.



# FY2024 Plan



Please join us.



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