

Optical Technology Demonstrations on CubeSats

In this talk, we will explore how CubeSats enable rapid testing of new optical technologies in space due to their commercial availability and lower launch costs. These technologies enhance space imaging for both Earth observation and astronomical purposes, as well as improve communication links using tools like MEMS fast steering mirrors and adaptive optics. Future CubeSat demonstrations may leverage onboard AI and optical systems to drive dynamic tasking, improve mission efficiency, and simplify the development of optical imaging spacecraft on orbit.

Professor Kerri Cahoy holds a B.S. in Electrical Engineering from Cornell University and M.S. and Ph.D. degrees in Electrical Engineering from Stanford University. Her research focuses on small satellites, including atmospheric sensing, exoplanet detection, and technologies like laser communications and adaptive optics. Cahoy has worked on several NASA and DARPA projects, such as the Deformable Mirror Demonstration Mission (DeMi), CubeSat Lasercom Infrared Crosslink (CLICK), and the TROPICS mission, and teaches courses at MIT in satellite engineering and space systems.

More info



A S T R A E U S . U F L . E D U

J A N U A R Y

27th

3 P M - 4 P M
R E I T Z U N I O N
A U D I T O R I U M



PROFESSOR
Kerri Cahoy

**Meet and Greet
with Dr. Cahoy at 2pm
before presentation!**

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