



## AEROSPACE ENGINEERING SCIENCES

# Seminar



### Allison Anderson

Research Fellow and  
National Space Biomedical Research  
Institute First Award Fellow  
Dartmouth College  
Geisel School of Medicine

## Experimenting with Astronauts: Technology Design to Improve Human Spaceflight

I will discuss my research focused on developing technologies to sustain and expand our human presence in space. Improved extravehicular activity (EVA) capabilities, such as improved space suit design, sortie resource management, or maintaining crew health, are critical to enable planetary space exploration. I developed a wearable pressure sensing system to quantify the contact interface between the person and space suit. Pressure sensing improves our understanding of suited movement to prevent EVA injury. My work draws from the fields of engineering design methods, biomechanics, electrical engineering, statistical data mining, and human experimentation to develop technologies that measure, address, and improve the body's response to spaceflight.

**Monday, April 6, 2015**  
**12:00 noon**  
**Onizuka Conference Room**

### Biography:

**Dr. Allison Anderson** received a Bachelor of Science degree at the University of Southern California in astronautics engineering in 2007. She received the Master of Science degree in astronautics engineering in 2011, the Master of Science degree in technology policy in 2011, and the Doctor of Philosophy in aerospace biomedical engineering 2014 from the Massachusetts Institute of Technology. She is currently a Post-doctoral Research Fellow at Dartmouth College Geisel School of Medicine as a National Space Biomedical Research Institute First Award fellow. Her research interests focus on technology development for human space flight applications and human subject experimentation.