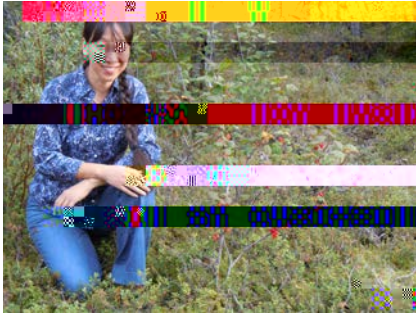# AEROSPACE ENGINEERING SCIENCES

Seminar

Jade Morton

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Global Navigation Satellite Systems for Remote Sensing Applications

In the position, navigation, and timing (PNT) solutions. Moreover, the distortions of GNSS signals caused by these factors contain information on the signal propagation medium and offer a powerful tool for passively sensing our environment. This presentation will focus on our effort to develop a worldwide network of GNSS sensors to capture and characterize the effects of ionospheric plasma disturbances on GNSS signals, develop novel GNSS receiver algorithms to mitigate the effects, and utilize the effects to study the upper atmospheric responses to solar and geomagnetic activities. The presentation will also discuss our future directions by highlighting our recent activities to broaden the scope of our efforts, including applying GNSS for sensing of lower tropospheric water vapor, ocean surface conditions, and disturbances of the Earth's surface. Several GNSS application projects involving undergraduate students will also be presented

Monday, April 25, 2016
11:00 AM
Onizuka Conference Room

Dr. Jade Morton is an electrical engineering Professor at Colorado State University. She received a PhD in EE from Penn State and was a postdoctoral research fellow at the University of Michigan. Prior to joining CSU, she was a professor at Miami University where she led the creation of its Electrical and Computer Engineering Department. Her research interests lie at the intersection of satellite navigation technologies and remote sensing of the Earth's atmosphere and surface. Her research and educational activities have used on developing advanced navigation and remote sensing techniques, studying the atmosphere using navigation satellite signals and other instruments, and developing new applications using satellite navigation technologies. She has received numerous research, teaching, and service awards and has served both the satellite navigation and atmospheric science communities in various capacities. She is a fellow of IEEE and a fellow of ION.