

Distinguished Lecture Series



Radiation Effects on Spacecrafts





Featuring Anup Omprakash
Principal Multi-Disciplinary
Engineer
at Raytheon Technologies

Wednesday, February 7, 2024 11:00 a.m. - Noon Location: TSRB 118 Auditorium

Abstract: Space can be a harsh environment for electrical components due to large temperature swings and the presence of high-energy particles. This talk will focus on the radiation effects associated with high-energy particles found in space and their impact on spacecrafts. We will initially cover some basic history of radiation effects and its associated physics. Afterwards, the radiation effects will be tied to system-level impact in spacecrafts and potential mitigation options.

Bio: Anup Omprakash received his BS in Electrical Engineering in 2013 and his Ph.D. in Electrical Engineering in 2019 from Georgia Tech, where he worked on the extreme environment (high temperature and radiation) operation of Silicon-Germanium Heterojunction Bipolar Transistors (SiGe HBTs) and SiGe HBT-based circuits. He is currently working at Raytheon Technologies as a Radiation Effects Engineer in El Segundo, CA.

Host: John Cressler