



**BUENAVENTURA
AEROSPACE AND ELECTRONIC SYSTEMS
&
MICROWAVE THEORY AND TECHNIQUES SOCIETIES**

Mars Helicopter Telecom

Courtney Duncan

Thursday July 19, 2018 at 6:30 pm

HUB 101 Pavilion

31416 Agoura Rd #105c, Westlake Village, CA 91361

Meetings are free and open to the public



Mars Helicopter is the first attempt at aerial flight on a planet other than earth. It is slated to go to Mars with the 2020 Rover. The air near the surface of Mars is extremely thin and cold, making it a significant engineering challenge to bear the overall vehicle mass, and stay warm enough to survive, on a limited power budget. The telecom subsystem shares these constraints, while providing a radio frequency tether to the rover, in support of five planned demonstration sorties. This talk is an overview of the Mars Helicopter Mission and the Telecom subsystem implementation.

About the Speaker



Courtney Duncan has worked on the Space Transportation System Ku-Band communications system, the Rouge family of science grade GPS receivers, the Space Interferometry Mission Microsecond ArcSecond Testbed, MONTE for deep space navigation, the Shuttle Radar Topography mission, GRAIL, the SCan TestBed, and the Iris CubeSat compatible deep space transponder. He currently manages the reprogrammable Signal Processing Group (337G), and leads the telecom team for the Mars Helicopter.

