

BUENAVENTURA AEROSPACE AND ELECTRONIC SYSTEMS SOCIETY

## CSUNSat1: A 2U CubeSat Designed by CSUN Students and Faculty to Space Test a JPL Low Temperature Capable Power System Sharlene Katz Jay Flynn

## Both are EE Professors in the Department of Electrical and Computer Engineering at California State University, Northridge

Thursday April 20, 2017 at 6:30 pm

CLU's Gilbert Sports Center, Room 254 130 Overton Court, Thousand Oaks, CA Meetings are free and open to the public Register here



CSUNSat1 is the product of a California State University Northridge (CSUN) / Jet Propulsion Laboratory (JPL) collaboration to space test a new low temperature capable power system. Engineers at JPL provided the payload consisting of a new cold temperature capable lithium ion battery technology and supercapacitors. A team of over 70 CSUN faculty and students designed, built, programmed, and tested the spacecraft that will carry this payload into low earth orbit and test the power system's performance in space. The ground station located on the CSUN campus was also designed and programmed by the CSUN team. The collaboration began in 2013 as a program to improve the pipeline of engineering graduates from CSUN to JPL. With funding from a NASA Smallsat Technology Partnership grant

and NASA's CubeSat Launch Initiative, CSUNSat1 was completed and launched in March 2017. Professors Jay Flynn and Sharlene Katz will discuss the CSUNSat1 mission along with the challenges faced during its development.



Professor Jay Flynn has been a part time faculty member the Department of Electrical and Computer Engineering at California State University, Northridge for seven years. He holds a B.S. (1977) degree in Electrical Engineering from the Illinois Institute of Technology and a Master of Fine Arts (1981) degree from Northwestern University. Before joining the faculty, he spent thirty years as a consulting engineer, specializing in broadcasting and communications in both the U.S. and Europe. At CSUN he has led a number of research projects in the area of communications, signal processing, and software defined radio.

Professor Sharlene Katz, Ph. D., has been a faculty member in the Department of Electrical and Computer Engineering at California State University, Northridge. For over 30 years. She graduated from the University of California, Los Angeles with B.S. (1975), M.S. (1976), and Ph.D. (1986) degrees in Electrical Engineering. Her areas of research interest include communications systems, software defined radio, signal processing, electronics, and neural networks. Dr. Katz is a licensed professional engineer in the state of California.

Over the past 10 years, Professors Katz and Flynn have collaborated on a number of research projects for the military (Navy, Air Force) and industry in the fields of communications and signal processing. Typically these projects involve undergraduate and graduate students in the engineering program at CSUN. For the past four years, they have collaborated with the Jet Propulsion Laboratory (JPL) on CSUNSat1, a 2U CubeSat now awaiting launch in March 2017.

**Location:** California Lutheran University Gilbert Sports and Fitness Center, 2nd floor, Rooms 254 130 Overton Court, Thousand Oaks, CA 91360

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Pizza/networking starts at 6:30 pm Talk starts at 7:00 pm