

**Date/ Time:** Tuesday March 10<sup>th</sup>, 2015  
 6:30 PM Pizza & networking  
 7:00 PM Presentation

**Location:** Skyworks Conference Room  
 Newbury Park, CA 91320  
 (See RSVP/Directions Below)

**Speaker:**

**Prof. James Buckwalter, UCSB**

**Title:**

**Millimeter-Wave Reconfigurable Transmitters Based on Doherty and Outphasing Architectures**

**Abstract:**

Mobile data demands are rapidly growing beyond the capabilities of licensed RF bands. Consequently, the industry is preparing for significant shifts from RF bands to millimeter-wave bands over the course of the next decade. This talk will present our research investigations into enabling circuit capabilities at RF bands for transmit and receive that will enable reconfigurable operation over licensed and unlicensed bands. Ongoing work has demonstrated record output power levels from CMOS SOI millimeter-wave PAs. This talk will discuss system demands on transmit schemes, specifically outphasing and Doherty-based modulation, at millimeter-wave bands for high power and peak efficiency.

**Bio:**

Jim Buckwalter is Professor of Electrical and Computer Engineering at the University of California – Santa Barbara (UCSB). He joined the faculty at the University of California – San Diego (UCSD), La Jolla, CA as an Assistant Professor in 2006 and was promoted to Associate Professor of Electrical and Computer Engineering in 2012. He received the Ph.D. degree in Electrical Engineering from the California Institute of Technology (Caltech), Pasadena, in 2006. He is the recipient of an IBM Ph.D. Fellowship, Defense Advanced Research Projects Agency (DARPA) Young Faculty Award, NSF CAREER Award, and IEEE Microwave Theory and Techniques Society (MTT-S) Young Engineer Award.

Skyworks, Intersection of West Hillcrest Drive and Lawrence Drive, Newbury Park, CA 91320  
 (not the main building, please use link below to green arrow that pinpoints building)  
<http://maps.google.com/maps?q=34.187542,-118.930994&num=1&t=h&vpsrc=0&ie=UTF8&z=18&iwloc=A>

Register : <https://meetings.vtools.ieee.org/m/32741>

Buenaventura ComSoc Chapter

