



**SSCS Distinguished Lecturers East Coast Tour**  
**A Mini-Conference with Three Distinguished Lectures**  
**October 15 from 3:30 to 9 PM, Lehigh University**

**3:30 PM Meet and Greet with Refreshments. Room PL 324 (RSVP)**

**4:15 PM K-Delta-1-Sigma Analog-to-Digital Converters. Rm PL 466**



This talk provides an overview of the KD1S ADC and provides experimental results verifying the data converter's operation. Potentially a solution to high-speed data conversion in nano-CMOS.

**R. Jacob Baker** is a Professor of ECE at the University of Nevada, Las Vegas. His research interests are integrated electrical/biological circuits and systems, interfacing CMOS to Silicon Photonics, and the delivery of online engineering education. More information at <http://CMOSedu.com>

**5:30 PM On-Chip Voltage and Timing Diagnostic Circuits. Rm PL 466**



This talk introduces practical and powerful techniques and circuits to observe and characterize on-die circuitry. Measuring voltage and timing information on the chip itself alleviates the bandwidth and noise limitations. Many of these techniques leverage existing circuitry and are highly digital.

**Frank O'Mahony** currently leads the I/O Circuit Technology group within Advanced Design at Intel in Hillsboro, Oregon, where he is a Principal Engineer.

**6:30 PM On-Your-Own Dinner at Lehigh Campus Dining Hall**

**8:00 PM THz and Millimeter-Wave Freq. Generation and Synthesis.**



This invited talk presents an overview and comparative study of recent research efforts leading to highly efficient frequency synthesis, signal generation, and mm-wave LO distribution networks in silicon, which are most critical and daunting tasks in a THz/mm-wave system. **(Rm PL 466)**

**Payam Heydari** is a Professor of EE at the University of California, Irvine. His research covers the design of terahertz/millimeter-wave/RF/analog integrated circuits. More info at <http://www.ece.uci.edu/~payam/>

**REGISTER NOW:** <https://meetings.vtools.ieee.org/m/28795>

**RSVP strictly required for refreshments at 3:00 PM Meet and Greet**

**QUESTIONS:** Contact Robert Peruzzi e: [Peruzzi@RPeruzzi.com](mailto:Peruzzi@RPeruzzi.com) p: 610 462 3939