

Analog and Mixed-Signal Center  
3128 TAMU  
College Station, TX 77843-3128  
Tel. (979) 458-4114  
Fax. (979) 845-7161  
E-mail:spalermo@ece.tamu.edu



**ELECTRICAL & COMPUTER  
ENGINEERING**  
TEXAS A & M UNIVERSITY

## SEMINAR

**Room M309 ANIN**

January 18, 4:10 - 5:10 P.M.

### **Time Domain Circuits – an overview**

by

Axel Thomsen  
Cirrus Logic

**Abstract:** Time-domain circuits represent state variables in frequency or phase rather than voltage or current. They have been touted as an important technique for fine line geometries with very fast devices, but little voltage headroom. This talk will give an overview of interesting work in this area ranging from PWM generators to PID controllers to VCO based ADCs.

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Axel Thomsen received his PhD from Georgia Tech in 1992. He was a professor at University of Alabama in Huntsville from 2003 to 2005. He joined Cirrus Logic in Austin, TX in 1995 to work on seismic and industrial data acquisition circuits. From 2001 to 2015 he worked on PLLs, RF isolators, and MCU peripherals for Silicon Labs. He re-joined Cirrus in 2015 as Engineering Fellow in the MEMS team. He is Chair of the Analog Subcommittee at ISSCC, involved with CICC and occasionally teaches at UT.