Title: New Tricks in Analog to Digital Conversion

Speaker: Professor Michael P. Flynn

Affiliation: Electrical Engineering and Computer Science, University of Michigan

Abstract: Although analog-to-digital converters have existed for more than 70 years, new ADC techniques continue to emerge. ADC architectures are evolving to deliver higher performance and also to take advantage of improved process performance. This presentation will discuss three new ADC architectures. A noise-shaping scheme shapes comparator noise and quantization noise in a SAR ADC. A bandpass ADC architecture enables efficient IF digitization. A new ring amplifier structure improves the resilience and efficiency of the ring amplifier architecture. Information on speaker in http://www.eecs.umich.edu/~mpflynn/index.html

Speaker Biography: Michael P. Flynn was born in Cork, Ireland. He received his Ph.D. degree from Carnegie Mellon University in 1995. He was with National Semiconductor in Santa Clara, CA, from 1993 to 1995. From 1995 to 1997 he was a Member of Technical Staff with Texas Instruments, DSP R&D lab, Dallas, TX. During the four-year period from 1997 to 2001, he was with Parthus Technologies, Cork. Dr. Flynn joined the University of Michigan in 2001 and is currently professor.

Michael Flynn is a 2008 Guggenheim Fellow. He received the 2011 Education Excellence Award and the 2010 College of Engineering Ted Kennedy Family Team Excellence Award from the University of Michigan College from Engineering. He received the 2005-2006 Outstanding Achievement Award from the Department of Electrical Engineering and Computer Science at the University of Michigan. He received the NSF Early Career Award in 2004. He received the 1992-93 IEEE Solid-State Circuits Pre-doctoral Fellowship. He is Editor-in-Chief of the IEEE Journal of Solid State Circuits (JSSC)

Seminar Time: 1:30PM-3:00PM on June 24th 2014

Seminar Location: Marcus Building rooms 1117-1118, Georgia Tech.

Organizer: Dr. Hua Wang, IEEE SSCS/CASS Atlanta Joint Chapter Chair, Assistant Professor, School of Electrical and Computer Engineering, Georgia Institute of Technology. Email: hua.wang@ece.gatech.edu. Phone: (404) 385-6003.

Light refreshments will be served at the seminar.