IEEE Solid-State Circuits Society SSCS Distinguished Lecture
IEEE SSCS/CASS Atlanta Joint Chapter Seminar

Title: Lessons from Brain Connectivity - for Next Gen NanoICs

Speaker: Jan M. Rabaey, Donald O. Pederson Distinguished Professor
Affiliation: Department of Electrical Engineering and Computer Sciences (EECS) at UC Berkeley

Abstract: With the number of devices integrated on a single integrated device continuing to grow, interconnect is playing an increasingly important role in setting the reachable performance and the energy efficiency. In that light, it is worth exploring how the only integrated system with equivalent or higher complexity – that is, the brain – is addressing the interconnect issue. While we are quite some ways off from fully understanding the brain and its dynamic operation, some observations are worth making that may help deciding how we should design and architect future 3D integrated circuits.

Speaker Biography: Jan Rabaey received his Ph.D degree in applied sciences from the Katholieke Universiteit Leuven, Belgium. In 1987, he joined the faculty of the Electrical Engineering and Computer Science department of the University of California, Berkeley, where he now holds the Donald O. Pederson Distinguished Professorship. He is currently the scientific co-director of the Berkeley Wireless Research Center (BWRC), as well as the founding director of the Berkeley Ubiquitous SwarmLab.

Prof. Rabaey has made high-impact contributions to a number of fields, including advanced wireless systems, sensor networks, configurable ICs and low-power design. His current interests include the conception and implementation of next-generation integrated wireless systems over a very broad range of applications, as well as exploring the interaction between the cyber and the biological world.

He is the recipient of a wide range of major awards, amongst which the IEEE CAS Society Mac Van Valkenburg Award, the European Design Automation Association (EDAA) Lifetime Achievement award, and the Semiconductor Industry Association (SIA) University Researcher Award. He is an IEEE Fellow and a member of the Royal Flemish Academy of Sciences and Arts of Belgium, and has been involved in a broad variety of start-up ventures.

Seminar Time: 3:00AM-4:30PM on Oct 23rd 2015

Seminar Location: TSRB 509 GEDC Board Room, 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.