Electrical Engineering Research Seminar

Title: *ESD challenges and opportunities in an interconnected world*

Speaker: Dr. Ann Concannon, Texas Instruments

Time: 11:00am to noon, Nov. 13 (Friday), 2020

Location: Zoom:
https://sjsu.zoom.us/j/84306955013?pwd=aXUybUk4MWxSQmVlZU9seFRKMXFMdz09

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Abstract:
Electrostatic discharge is ever-present, potentially damaging, inescapable in all environments, and particularly harmful to semiconductor devices. As technology features have scaled over the last decades, from micron to nanometer features, designer have to face the reality that ESD risks don't reduce, and increased focus is required to minimize the impact of ESD protection on device performance and chip area. We will explore the design considerations at both IC and system level, on commercial, automotive, IoT and sensor applications. With knowledge about the ESD risks, and the system requirements, co-design is recognized as the pathway to an optimal solution.

Presenter Biography:
Ann Concannon is a Distinguished Member of Technical Staff at Texas Instruments, working in the Analog ESD group, working with technology development teams, design teams and external customers to engage early on ESD challenges on projects with high visibility on execution and revenue opportunities.

Ann graduated from NUIG, Ireland in 1991 with a BE in Electronic engineering, and in 1996, was awarded a PhD from UCC, Ireland, for her work on device simulation of floating gate non-volatile memory.

Awarded a Marie Curie Fellowship in 1996, she worked on joint silicon device development projects with European Industry, including NXP and ST, and led a research group at the Tyndall Institute in Ireland. Ann moved to Santa Clara, CA after joining National Semiconductor in 2000 and subsequently Texas Instruments in 2011, where she has focused on ESD and Power device SOA. Ann is a senior member of the IEEE, and an active member of the ESDA, with many publications and patents in NVM, Si and ESD. In 2017, Ann was elected to the board of the ESDA, and is a founding member of the Bay Area ESD group; a member of the ESDA education committee and is on the EOS/ESD symposium steering committee