

National PhD School in Micro and Nano Electronics

October 23<sup>rd</sup>, 2024, 4PM Magenta Seminar Room Dept. ECBE, D Floor

Industrial Topics in Microelectronics and Photonics - Seminars

## The history and challenges of medical echography systems

**Abstract:** The aim of the seminar is to give to the students and PhDs some curios information about the history of ultrasound studies from the first experiments in 1793 by Abate Spallanzani studying the bats to the sonars to the medical echography. We will see how an echography machine works at system and algorithm level and then we focus on the contribution that the microelectronics with High Voltage IC gave to the innovation boosting the image quality. We will see some design challenges.

## **Speaker: Giulio Ricotti**





**Giulio Ricotti** after earning his Electronics Engineering degree, joined ST in 1994 as a design engineer in their Smart Power (SP) products group. Currently is Design Director and Company Fellow, he has more than 70 patents and has authored 70 publications. Giulio has also been awarded the "Premio dei Premi" in 2009 by the Italian president Giorgio Napolitano for his crucial contribution to innovation with the 4D ultrasound imaging project that is used today all over the world for pregnancy and cardiology screenings.