



UNIVERSITÀ
DI PAVIA

Ph.D. Program in Electronics, Computer Science and Electrical Engineering
Ph.D. Program in Microelectronics

SEMINAR

“20 years and counting: an overview of the world of MEMS”

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Wednesday 14 June 2023, h. 16:00

Blue Seminar Room (E Floor)

Online: <https://us02web.zoom.us/j/84650456080>

Abstract - This seminar will present an overview of the most common MEMS (Micro-Electro-Mechanical Systems) devices in the market: from sensors - like the accelerometers, gyroscopes and magnetometers - that can be found in all modern smartphones, to actuators - like microlenses and micromirrors – that are currently used in AR/MR visors. The working principles of MEMS sensors will be examined, together with the main challenges that the semiconductor industry must constantly face to keep up with today's markets requests. An overview will be given of the main experimental techniques required to characterize these devices, that - by definition - need to constantly interact with the outside world, together with examples of new and future applications.

Bio - Marco Soldo was born in La Spezia, Italy, in 1980. He received the M.S. Degree in Electronic Engineering from the University of Pavia in 2008. and the Ph.D. Degree in Electronic Engineering and Computer Science in 2012 from the same University. Since 2012, he is working in STMicroelectronics, based in Cornaredo (MI), Italy, as MEMS Characterization and Validation Engineer, in the AMS MEMS SubGroup, where he has been involved in the product development of MEMS inertial sensors for automotive, medical and industrial applications, MEMS micromirrors for images projection and piezoelectric MEMS actuators for optical, ultrasonic and inkjet applications. He is now head of special projects characterization and responsible of the MEMS Characterization Laboratories.

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