University of Pavia
Ph.D. School in Electronics, Computer Science and Electrical Engineering
Ph.D. School in Microelectronics

SEMINAR

An Overview On The Design Of Pulsed Power Amplifiers For Conventional Navigational Aids Systems

Ing. Massimo Di Fabrizio, PhD
Ing. Luigi Maggi, PhD

THALES ITALY

December 20th 2023, 14 pm – 16 pm
Room: Magenta, D floor

Abstract: Air traffic has consistently grown since 2003 and it is now boosting up in 2023, prompting a need for aviation authorities to upgrade their ATC systems. Thales group developed comprehensive solutions for busy airports, covering various flight phases. After a quick introduction to Thales Group, its activities in Italy and the conventional navigational aids (Navaids) business for which Gorgonzola (MI) site is a center of excellence for the Group, the speakers will finally focus on the design of pulsed power amplifiers that achieve stringent spectral requirements, discussing both squared pulse modulation scheme and envelop tracking.

Bio:
- **Massimo Di Fabrizio** got his Master's degree in Electronic Engineering from the University of Ancona with a thesis on a 2-5GHz broadband transceivers in planar technology and his PhD in Materials, Waters and Soils Engineering from the Università Politecnica delle Marche defending his thesis on Liquid Crystals (CL) for the correction of optical aberrations and the design of a reconfigurable plasma antenna (Gas Antenna). Massimo Di Fabrizio has more than 15-years' experience in the design of RF active components (power amplifiers based on LDMOS and GaN technology, up/down converters, antennas) as well as gained industrial competences on product testing and commissioning. He is currently working as a RF Senior Engineer in Thales Italy, Gorgonzola (MI) site
- **Luigi Maggi** got his Master's degree in Electronic Engineering from the "La Sapienza" - University of Rome with a thesis on the "Design of driving system controller based on FPGA technology" and his PhD in Telecommunication from Politecnico di Milano defending his thesis on Azimuth Digital Beamforming techniques and the study of new solutions for multichannel architecture for image SAR. Luigi Maggi has more than 10-years' experience in Sensors and Radar systems for industrial, mining and military field of applications. In particular, he has been for many years the leader of the hardware design and development of interferometric single channel and MIMO Radars operating at different frequency bands (V, W, K) as well as Radar benchmarking equipment to support system ground testing activities. He is currently working as Hardware Manager for Electronic Engineering and Hardware Architect for Navaids products in Thales Italy, Gorgonzola (MI) site.

Organizer
Prof. Lorenzo Silvestri
PESB
IEEE Student Branch Pavia
Seminar in English

Ph.D. Coordinator
Prof. Ilaria Cristiani
Prof. Piero Malcovati

For more information: lorenzo.silvestri@unipv.it