



IEEE Student Branch Pavia



University of Pavia

## SEMINAR

### Design of Leaky-Wave Antennas in SIW Technology

17<sup>th</sup> February, Aula Seminari – D floor – 4 pm

**Dr. Alejandro Javier Martínez Ros**

Senior Researcher – Universidad de Sevilla

**Abstract** – Leaky-wave antennas are a particular type of antennas, whose radiation characteristics are determined by their complex propagation constant. In particular, the phase constant determines its radiation angle and the leakage rate the amount of radiated energy. Therefore, it is important to have an effective control over both parameters. The present seminar will introduce some main aspects about LWAs and their application to the design of a LWA in Substrate Integrated Waveguide technology.

**Short Bio** – Alejandro Javier Martínez Ros (S'11) was born in Cartagena, Spain, in 1981. He received the Telecommunication Engineer and Ph.D. degrees from the Universidad Politécnica de Cartagena (UPCT), Cartagena, Spain, in 2005 and 2014, respectively. During 2006, he worked as RF engineer at the IMST GmbH in Kamp-Lintfort, Germany, where he was involved in the development of EBG structures for high precision antennas for the Galileo system, and in phase array and patch antennas for global navigation satellite systems. In 2008, he joined the Telecommunication and Electromagnetic Group (GEAT), UPCT, as a Research Assistant. He has been a visiting Ph.D. student at the Queen's University Belfast, Northern Ireland (U.K.). His scientific research is mainly focused on the analysis and synthesis of leaky-wave devices for microwave and millimeter waveband applications. Recently he has gained the position of Senior Researcher at the Universidad de Sevilla.

**Organizer**

Enrico **Massoni**

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