



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

SEMINAR

Ground Station Antennas

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EUROPEAN SPACE OPERATIONS CENTRE
EUROPEAN SPACE AGENCY
Darmstadt, Germany

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Aula seminari ex Dipartimento di Elettronica, piano D

Abstract: This seminar will present the strategies that the European Space Agency is putting in place to overcome the present and future operational challenges in the domain of the Ground Stations Antennas.

Bio: Filippo Concaro was born in Tortona, Italy, in 1979. He received the “Laurea” degree in Electronic Engineering from the University of Pavia, Italy, in 2003, with a Thesis on “Analysis and Synthesis of the Beam Waveguide System of ESA Deep Space Antenna 2” after a 6-months traineeship in the Ground Station Antenna (GSA) Section at the European Space Operation Centre (ESOC) in Darmstadt (Germany). Since then has been always working in ESOC, despite a parenthesis of 14 months at the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), also located in Darmstadt.

During all these years he was involved in the design and testing of several Ground Station projects all over the European Space Agency Tracking Network (ESTRACK). In particular he was Technical Officer of the so-called XAA (X-Band Acquisition Aid) project, with terminals deployed in Perth (Australia), Kourou (French Guyana) and Maspalomas (Canary Islands). These antennas, together with the NNO-2 in New Norcia (Australia) and MAL-X in Malindi (Kenia), for which he was also Technical Officer, provided ESA with the capacity to support complicated Launch and Early Orbit Phase (LEOP) operations for X-Band satellites such as Lisa Pathfinder (12/2015) and EXOMARS (03/2016). Presently he is the responsible of the SNOWBEAR Project, a 6.4m antenna terminal for High Data Rate reception at Svalbard (Norway), he is also involved in the preparation of the ESA Deep Space Network to support the High Data Rate K-Band frequency band (26DS project) and in several other developments ranging from Large Deep Space antennas (up to 64m diameter) to small acquisition terminals (down to 0.7m) and from theoretical studies to operational applications.

Organizers

Prof. Marco Pasian

Ph.D. Coordinators

Prof. Paolo Di Barba