SHORT COURSE PROPOSAL TO EuCAP 2014, The Hague, THE NETHERLANDS

Course title: Multibeam Antennas and Beamforming Networks



Piero Angeletti received the Laurea degree in Electronics Engineering from the University of Ancona (Italy) in 1996, and the PhD in Electromagnetism from the University of Rome "La Sapienza" (Italy) in 2010. His 17 years' experience in RF systems and payloads engineering and management encompasses conceptual/architectural design, trade-offs, detailed design, production, integration and testing of satellite payloads and RF equipment for commercial/military telecommunications, RADARs and navigation (spanning all the operating bands and set of applications). Dr. Angeletti is currently member of the technical staff of the European Space Research and

Technology Center (ESTEC) of the European Space Agency, in Noordwijk (The Netherlands), and Head of the Radio Frequency Equipment and Technology Section in the RF Payload Systems Division of the ESA Technical and Quality Management Directorate which is responsible for RF space communication systems, instrumentation, subsystems, equipment and technologies. In particular he oversees ESA R&D activities related to flexible satellite payloads, RF front-ends and on-board digital processors. Dr. Angeletti authored/co-authored more than two hundred technical papers published in peer reviewed professional journals and international conferences' proceedings.



Giovanni Toso (S'93, M'00, SM'07) was born in La Spezia (Italy) in 1967. He received the Laurea Degree (*summa cum laude*) and the Ph.D. in Electrical Engineering from the University of Florence, Florence, Italy, in 1992 and 1995, respectively. In 1996 he was visiting scientist at the Laboratoire d'Optique Electromagnétique, University of Aix-Marseille III, Marseille, France. From 1997 to 1999 he was a Post Doctoral student at the University of Florence. In 1999 he was a visiting scientist at the University of California, Los Angeles (UCLA). In the same year he received a scholarship from Thales Alenia Space (Rome, Italy) and he has been appointed researcher in a Radioastronomy Observatory of the Italian National Council of Researches

(CNR). Since 2000 he is with the Antenna and Submillimeter Section of the European Space and Technology Centre of the European Space Agency, ESA ESTEC, Noordwijk, The Netherlands. He has been initiating and contributing to several R&D activities on satellite antennas based on arrays, reflectarrays, constrained lenses and reflectors. G. Toso has co-authored more than 250 technical papers published in peer reviewed professional journals and international conferences' proceedings and more than 10 international patents. In 2009 he has been coeditor of the Special Issue on Active Antennas for Satellite Applications in the International Journal of Antennas and Propagation. He is guest editor, together with Dr. R. Mailloux, of the Special Issue of the IEEE Transactions on Antennas and Propagation on "Innovative phased array antennas based on non-regular lattices and overlapped subarrays" to be published in April 2014. G. Toso is an Associate Editor of the IEEE Transactions on Antennas and Propagation.