



Università Tor Vergata, Roma
Ingegneria Civile e Ingegneria Informatica

GeoInformation PhD Curriculum

GeoInformation Seminar

DISP meeting room, Ingegneria dell'Informazione, 1 Via del Politecnico
28 March 2013, starting at 15:00

Ruggero Giuseppe Avezzano

**X-band PolSAR applications:
COSMO-SkyMed towards the “Second Generation” Mission**

The experience being gained from the more recent space borne Synthetic Aperture Radars is opening the path to applications of polarimetry, and today almost all the major space agencies foresee polarimetric capabilities for their future SAR missions.

The X-band space borne SAR program of the Italian Space Agency (ASI) is going to continue with the COSMO-SkyMed Second Generation, which is expected to be a coherent dual polarimetric system, with the addition of an experimental full-polarimetric mode.

The aim of the presentation is to analyze the new polarimetric capabilities of the COSMO SG and to discuss a framework of quality standards relative to those applications that exploit the information contained in the X-band high-level polarimetric products.

Ruggero Giuseppe Avezzano received the Laurea Magistrale degree in Telecommunications Engineering in 2011 from the Tor Vergata University, Rome, Italy, where is now pursuing his PhD degree, GeoInformation Curriculum, supported by a scholarship from ASI.

In 2011 he was with the Oceanography Department of the Earth Observation Institute of DLR, Oberpfaffenhofen, Germany, working on automatic detection of oil spill from X-band Synthetic Aperture Radar data.

His research deals with the exploration and definition of applicative scenarios for the polarimetric data that are expected to be provided by the COSMO-SkyMed Second Generation Mission.

You are cordially invited to attend.