Università Tor Vergata, Roma

Dipartimento di Informatica, Sistemi e Produzione

GeoInformation Doctorate

GeoInformation Seminar

DISP meeting room, Ingegneria dell'Informazione, 1 Via del Politecnico
17 January 2012, starting at 16:00

Massimo Morigi

Monitoring of the precursor elements changes the stability of ordinary masonry buildings (displacements, subsidence, slippage and inclinations), using Permanent Scatterers (PS) and Small Baseline Interferometry, through the use of software STAMPS/TMI, GAMMA and SARscape/ ENVI, supported by classical ground truth (GPS, DGPS and Rapid Visual Screening) and a new generation of passive Corner Reflector.

The title explains clearly the purpose of this work. The SAR data will be acquired through two projects. The first approved by the DLR (CAL_VAL0387) and the second being approved by ESA (EOPI-10828). The first area of work aims to address the hypothetical movements of the building in the city of L'Aquila, Italy, related to the seismic swarm occurred before the great earthquake of 6th April 2009; will be acquired and processed approximately 150 images ENVISAT/ASAR and 200 images ERS2. It is to underline that the works and papers available in the literature so far are mostly centred on the evaluation of the earthquake itself and post event impact.

Massimo Morigi is currently a technical assistant in Italian Institute for Environmental Protection and Research (ISPRA), Nature Defence Department. He has worn the uniform of the Air Force for 25 years, and was used as a Photointerpreter Analyst since 1979. His research interests, as well as active and passive remote sensing, also pertain in the Geography of Disease.

Fabiano Costantini

SAR Interferometry potential for future applications of next ESA Sentinel-1 mission

The project concerns SAR interferometry techniques for prediction of Sentinel-1 data potentialities.

The following case studies have been considered: tectonic subsidence in Thessaloniki (Greece) and detection of Etna (Italy) lava flows using permanent scatterers and small baseline interferometry, and speckle tracking analysis over Viedma glaciers in Argentina.

Fabiano Costantini received his M.Sc (Laurea specialistica) degree from Tor Vergata University in 2009. He is currently enrolled in the third year of the GeoInformation Phd program at the same University.

He collaborates with ESA/ESRIN on Earth observation educational activities.

You are cordially invited to attend.