Non-invasive investigations for enhancing the knowledge and the valorisation of the cultural heritage: first results of the Malta-Italy bilateral project

Raffaele Persico\textsuperscript{1,2}, Giovanni Leucci\textsuperscript{1}, Lara De Giorgi\textsuperscript{1}, Maurizio Lazzari\textsuperscript{1}, Sebastiano D'Amico\textsuperscript{3}, and Emanuele Colica\textsuperscript{3}

\textsuperscript{1}Institute of Science for Cultural Heritage ISPC-CNR
\textsuperscript{2}International Telematic University Uninettuno UTIU
\textsuperscript{3}Department of Geosciences of the University of Malta

“Non-invasive investigations for enhancing the knowledge and the valorisation of the cultural heritage” is a biennial project financed by the Italian National Research Council (CNR) and by the University of Malta, started in 2018 until to April 2020. It has been aimed to perform geophysical investigation both in Italy and in Malta in order to enhance the knowledge, and therefore also the preservation and the valorisation of some relevant monuments and archaeological sites in both countries. In particular, we have performed ground penetrating radar [1-2], resistive [3] and passive seismic investigations [4] within or close to archaeological sites, churches, roman monuments and watchtowers and have identified [5], depending on the case, anomalies due to buried rooms, tombs, roads or just geological differences in the subsoil.

Geophysical investigations were also integrated by regional and local geomorphological survey applied to the natural heritage of Gozo Island, such as in the case of the natural arch of Wied il-Mielah and the terraced high paleosurfaces, on which ancient watchtowers are often present.

In some cases, excavations were possible too, in other cases we hope they will be done in a future. Not all the times the excavations enlightened the hypothesized anomalies, but all the times the anomalies corresponded to some physical target or some physical buried discontinuity of the soil.

At the conference, we will provide some insight on the achieved results, with special emphasis on the results achieved during the second year of the project.

References


