



## Short Term Scientific Mission within the TU1208 Cost Action

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In the framework of the Cost Action TU1208, in 2015 a Short Term Scientific Mission (STSM) in Malta was financed. Within that STMS, GPR [1-3] and passive seismic measurements were conducted in sites of naturalistic values as well as within or nearby several monuments of historical interest in the island of Malta. In particular, an area close to the Gajn Tuffiea Tower, in the Golden bay area was investigated, as well as the Madliena tower in Pembroke (both are watching towers built by the knights of Malta). Moreover, an area in the yard of the church of Santa Maria in Birkikara was investigated, some Bscans close to the La Ferla Cross were examined and the chapel of Aragone within the co-cathedral of St. John in Valletta was prospected too. The results generate a fruitful collaboration that has continued and have driven to the organization of a training school held in Valletta, within which the church of the Jesuits was partially prospected, as well as an area within the historical Agrotti Botanical Garden. Then a subsequent STMS allowed to perform ERT prospecting close to the town of Mgarr which of interest for understanding the geological formations in that area of the island. A further school was then organized also in Messina, Italy, in collaboration with the University of Malta and IBAM-CNR, within which prospecting were performed in the historical church of Sts. Peter and Paul in Forza D'Argò and in the archaeological site of Scifi [4]. The entire co-cathedral of St. John was prospected too, including the crypt of the Grand Masters, closed for the public. Last but not least, a project financed by the University of Malta has been financed, under the TOSFA call. The project acronym is TDRpro and is aimed to simulate at with the finite difference method a TDR probe able to discriminate the dielectric permittivity and the magnetic permeability of a material under test.

### References

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