

KM3

Orlando Ciaffoni(Ass), Marco Cordelli(Ass), Agnese Martini (Resp.), Luciano Trasatti (Ass.), Roberto Habel (Ospite)

The KM3 collaboration, in the framework of the KM3Net initiative, aims at building a km³ scale Cerenkov neutrino detector in the Mediterranean Sea.

The PORFIDO probes are designed to add oceanographic sensors to the main installation.

Four probes were installed on the tower of NEMO Phase II (deployed in april 2013) and worked properly, reading and transmitting Temperature from a depth of 3500m until the tower was turned off in june 2014.

The LNF group has continued the development of the PORFIDO probes adding two 24 bit ADCs with 2 NTC temperature probes read by the WISP and providing two temperature measurements each with an accuracy of better than 0.001 °C.

In addition we have realized a prototype of a salinity monitor connected to the same ADC with a resolution of about 1 ppm.

The whole system is being modified to install it on tne DOMs which constitute the backbone of the experiment. One PCB has been built and a second version is under test. It will be finilized and produced in 2017