VLVnT - 2015 : Very Large Volume Neutrino Telescope



Contribution ID: 80

Type: not specified

The KM3NeT-IT Tower data acquisition and data transport electronics

Tuesday 15 September 2015 14:33 (15 minutes)

The KM3NeT European project has entered the production stage of a large volume neutrino telescope that will be deployed at about 100 km off the Sicily coast. The forthcoming installation includes 24 strings, equipped with multi-PMT optical modules, and 8 towers. The KM3NeT tower design is based on the NEMO Phase-2 prototype tower, deployed in March 2013. In order to optimize production costs, power consumption, usability and to simplify calibration procedures, the whole electronics chain has been re-engineered and partially redesigned by taking advantage of the previously gained experience and technological progress. The aim of this contribution is to give a description of electronics, including front-end, data transport and clock distribution systems, and data acquisition, of the KM3NeT towers.

Primary author: NICOLAU, Carlo Alessandro (INFN - National Institute for Nuclear Physics)

Co-authors: CAPONE, Antonio (Universita e INFN, Roma I (IT)); PERRINA, Chiara ("La Sapienza" University of Roma & INFN); Dr AMELI, Fabrizio (INFN); SIMEONE, Francesco (INFN); DE BONIS, Giulia

Presenter: NICOLAU, Carlo Alessandro (INFN - National Institute for Nuclear Physics)

Session Classification: Parallel Session E