

On May 7, a prototype of the KM3NeT detection unit consisting of a string with three optical modules has been deployed at a depth of 3500 metres, 100 kilometres off the coast of Portopalo di Capo Passero, Italy. Following the successful deployment of the first optical module off the coast of Toulon, France in April 2013, the construction of the KM3NeT research infrastructure also progresses at the Italian site in the Mediterranean Sea.

**About KM3NeT:**

KM3NeT is a large international effort with a challenging and compelling objective: The discovery of neutrino sources in the Universe. Neutrinos are sub-atomic particles, well known for their reluctance to be detected. A discovery of a neutrino source provides for identification and understanding of astrophysical particle accelerators. The KM3NeT research infrastructure will be shared by a multitude of other sciences, making continuous and long-term measurements in the area of oceanography, geophysics, and marine biological sciences possible. The KM3NeT collaboration has about 240 members from 40 European institutes and Universities.

On May 7, a prototype of the KM3NeT detection unit consisting of a string with three optical modules has been deployed at a depth of 3500 metres, 100 kilometres off the coast of Portopalo di Capo Passero, Italy. Each optical module consists of a 17" glass sphere, equipped with 31 ultra-fast sensors that can detect light at the quantum level, electronics for the digitisation of the signals and fibre optics to transmit the data to shore. The complete KM3NeT research infrastructure will consist of about 12,000 such modules distributed in the Mediterranean Sea off the coasts of France, Italy and Greece, and covering several cubic kilometres of deep-sea water.

Following the successful deployment of the first optical module off the coast of Toulon, France in April 2013, the construction of the KM3NeT research infrastructure also progresses at the Italian site in the Mediterranean Sea. The construction will continue through several phases. The completion of the first phase is expected by the end of 2016. Plans for a next phase exist which is aimed at a measurement of the signal of high-energy neutrinos from the cosmos that has recently been reported by the IceCube collaboration.

**More information:**

KM3NeT web page: <http://www.km3net.org/>

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**Figure 1:** Prototype of a KM3NeT string (mounted on the launcher vehicle) on board the Nautical Tide on its way from Malta to the deep-sea site, 100 kilometres off the coast of Portopalo di Capo Passero, Italy.