

## The ANTARES deep-sea neutrino experiment

The ANTARES deep-sea neutrino telescope currently is the largest neutrino detector in the Northern Hemisphere. The instrument consists of a three-dimensional array of 885 photomultiplier tubes, arranged in 12 lines anchored at a depth of 2500 m in the Mediterranean Sea, 40 km offshore from Toulon (France). An additional instrumented line is used for environmental monitoring and for R&D towards acoustic neutrino detection. The photomultiplier tubes detect the Cherenkov radiation of charged secondary particles produced by high energy neutrinos interacting in or around the detector. Charged-current interactions of muon neutrinos is the reaction channel of central interest. The trajectories of the resulting muons are reconstructed with high precision, revealing the direction of the incoming neutrinos. ANTARES is taking data with its full 12 line configuration since May 2008, and has been operated before in a 5 and 10 line setup for more than a year. The hardware components and their calibration as well as the performance and long-term stability of the detector and the first physics results will be discussed.

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