

Results from the ANTARES neutrino telescope

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The ANTARES detector is an underwater neutrino telescope, the largest in the Northern Hemisphere and the first one ever built under the sea, located in the Mediterranean Sea 40 km off the Southern coast of France, at a depth of 2.5 km. It comprises 885 photomultiplier tubes distributed in twelve detection lines. The signal due to neutrinos is searched by reconstructing the tracks of secondary particles produced in the surroundings of the detector. The detector is in data taking with its final configuration since 2008. It is aimed at identifying the sources, either steady or flaring, of cosmic neutrinos, and is also suitable for detection of dark matter within the Sun and/or Galactic Centre. ANTARES is in particular in an optimal location to cross-check the signal of cosmic neutrinos reported from IceCube. Several multi-messenger analyses have been also attempted, including the search of coincidence signals of neutrinos with gravitational waves. Additional topics include neutrino oscillations or the search of exotic particles, like nuclearites and magnetic monopoles. Results from the all such analyses will be presented.

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