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The ANTARES neutrino telescope

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After more than fifteen years, the ANTARES detector stopped its data taking last February and is currently being dismissed. ANTARES has marked the history of undersea neutrino telescopes, demonstrating the feasibility of this technology and paving the way to neutrino telescopes of the new generation, in particular to the KM3NeT-ARCA and ORCA detectors, at present under construction in two deep sites of the Mediterranean Sea. Thanks to its location in the Northern hemisphere and to excellent optical properties of sea water, it offered a privileged point of view towards the Galactic center and the Galactic plane. Despite its small size, it provided important contributions to constrain and limit theoretical models. ANTARES data have been used to cover a wide range of studies ranging from the search of a diffuse flux of high energy neutrinos to the identification of neutrino sources to the search for dark matter candidates. Moreover, ANTARES has been involved in a rich program of multi-messenger activities, searching for neutrinos in space/time coincidence with gravitational waves events and with transient electromagnetic emissions as well as sending alerts to a wide network of observatories all over the world.

In this talk the scientific adventure of ANTARES will be shortly reviewed and the main scientific results will be presented and discussed.

Summary

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