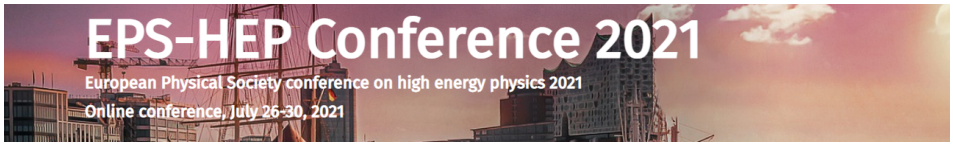

Contribution ID: **697** Type: **Parallel session talk**

The ANTARES neutrino telescope (on behalf of the ANTARES Collaboration)

Tuesday 27 July 2021 11:15 (15 minutes)

Installed at about 2500 m under the Mediterranean Sea, in front of the southern French coast, the ANTARES detector is the first undersea neutrino telescope and has been collecting data since 13 years in its final configuration. Its main scientific goal is the search for astrophysical high energy neutrinos, either coming from resolved sources, or as a diffuse excess of very high energy events, or in space-time coincidence with other cosmic messengers such as gravitational waves and electromagnetic signals over the whole energy spectrum. The good optical properties of sea water yield the reconstruction of neutrino directions with a resolution better than one degree, allowing for all-flavour astronomy. The location of ANTARES, in the Northern hemisphere, also offers a privileged point of view towards the Galactic plane and centre, where interesting high energy candidate sources could be hosted.
In this contribution a general view of the most important scientific achievements of ANTARES will be given, with particular focus on its wide program of multi-messenger research.

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Collaboration / Activity

ANTARES Collaboration

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Session Classification: T01: Astroparticle and Gravitational Waves

Track Classification: Astroparticle and Gravitational Waves