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Recent results from the ANTARES neutrino telescope

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The ANTARES neutrino telescope is currently the largest operating water Cherenkov detector and the largest neutrino detector in the Northern Hemisphere. It comprises 885 optical modules distributed on 12 detection lines anchored at a depth of about 2,5 km in the Mediterranean Sea near Toulon (France). Its main scientific target is the detection of high-energy (TeV and beyond) neutrinos from cosmic accelerators, as predicted by hadronic interaction models, and the measurement of the diffuse neutrino flux. Its location allows for surveying a large part of the Galactic Plane, including the Galactic Centre.

In addition to the standalone searches for point-like and diffuse high-energy excesses, ANTARES has developed a range of multi-messenger strategies to exploit the close connection between neutrinos and other cosmic messengers such as gamma-rays, charged cosmic rays and gravitational waves. This contribution will provide an overview of the recently conducted analyses, including e.g. a search for neutrinos from the Fermi bubbles region, searches for optical counterparts with the TAToO program, and searches for neutrinos in correlation with blazars, microquasars and gravitational lenses. Further topics of investigation, covering e.g. the search for neutrinos from dark matter annihilation, searches for exotic particles and the measurement of neutrino oscillations, will also be reviewed.

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