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Indirect Search for Dark Matter with the ANTARES and KM3NeT Neutrino Telescopes

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The ANTARES detector is the largest undersea neutrino telescope in the Northern hemisphere, installed in the Mediterranean Sea offshore France. It has been continuously taking data for more than ten years.

One major goal of ANTARES is the search for high energy neutrinos potentially produced by self-annihilation of Dark Matter particles trapped in massive objects such as the Sun or the Galactic Centre. Latest results of ANTARES on the indirect search for Dark Matter from the Sun, the Earth and the Galactic Centre are presented. In particular, the results obtained by ANTARES on Dark Matter searches from the Galactic Centre lead to the most stringent limits with neutrino detectors on the annihilation cross-sections for high mass WIMPs.

Finally, preliminary sensitivities on indirect search for Dark Matter with KM3NeT, the next generation neutrino telescope already under construction in the Mediterranean Sea, are also presented.

Summary

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