ID de Contribution: 34

Type: Contributed talk

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

mercredi 27 juin 2018 12:40 (20 minutes)

The ANTARES detector is the largest water Cherenkov 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 towards the Sun, the Earth and the Galactic Centre are presented. In particular, the results obtained by ANTARES on Dark Matter searches towards the Galactic Centre lead to the most stringent limits 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.

Author: BERTIN, Vincent (CPPM)

Orateur: BERTIN, Vincent (CPPM)

Classification de Session: Dark matter indirect detection II

Classification de thématique: Indirect detection