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KM3NeT sensitivity and discovery potential for galactic point-like sources

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The KM3NeT consortium <http://www.km3net.org> aims at the construction of a cubic-kilometre-scale neutrino telescope for the Northern hemisphere with an integrated platform for earth and deep sea sciences.

The telescope location in the Mediterranean Sea will allow for surveying a large part of the Galactic Plane (87%), including the Galactic Centre, thus complementing the sky coverage of IceCube at the South Pole. Due to its good angular resolution, 70% of selected events lie within 0.2° of the neutrino direction, and large size, about 5 km³ of instrumented volume, this project will provide the scientific community with a very powerful instrument to study many astrophysical objects, including supernova remnants, active galactic nuclei, gamma-ray bursts and possibly also dark matter.

One of the main physics objective of KM3NeT is the search of neutrinos from galactic sources.

In this contribution first results on sensitivity and discovery potential for point-like galactic sources and in particular for the Supernova Remnant RXJ1713 are presented. Further improvements on the reconstruction algorithm and detector optimisation are in progress.

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