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Potential of KM3NeT to observe galactic neutrino point-like sources

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KM3NeT (<http://www.km3net.org>) will be the next-generation cubic-kilometre-scale neutrino telescope to be installed in the depths of the Mediterranean Sea. This location will allow for surveying the Galactic Centre, most of the Galactic Plane as well as a large part of the sky.

The search for neutrinos from galactic sources is a relevant physics objective for KM3NeT. Among galactic point-like sources, SuperNova Remnants (SNR) and Pulsar Wind Nebulae (PWN) are among the most promising sources of high-energy cosmic rays as well as neutrinos. In the hypothesis of hadronic gamma emission, models for galactic neutrino sources are robustly constrained by TeV-gamma observations thus allowing to obtain realistic estimates of the neutrino fluxes.

We report KM3NeT discovery potential for the SNR RXJ1713.7-3946 and the PWN Vela X and its sensitivity to point-like sources with an E^{-2} spectrum. Other sources and possibility of a stacking analysis for several classes of source are under investigation. Further studies aiming at the improvements of detector capabilities are on-going.

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