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Central Molecular Zone expectations using KM3NeT data

The Central Molecular Zone is a specific region of few hundred parsecs in the centre of our Galaxy that has an estimated gas density two orders of magnitude larger than the galactic average one and represents 5% of the whole galaxy gas mass. It contains some of the most massive molecular clouds such as Sgr A, Sgr B, and Sgr C as well as potential local Pevatrons. These conditions underline a privileged target where to find out a signature of Galactic cosmic ray interactions.
A preliminary diffuse neutrino study from the Central Molecular Zone using KM3NeT data is reported. We show the level of the actual and future KM3NeT ARCA geometries for this source.

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