

Expectations for the high-energy neutrino detection from starburst galaxies with KM3NeT/ARCA

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Starburst galaxies (SBGs) and more generally starforming galaxies represent a class of galaxies with a high star formation rate (10-100 Mo/year). Despite their low luminosity, they can be considered as guaranteed “factories” of high energy neutrinos, being “reservoirs” of accelerated cosmic rays and hosting a high density target gas in their central region. In this contribution, the possibility of observing their neutrino signals is explored with the KM3NeT/ARCA telescope, which is in construction in the Mediterranean sea. The differential sensitivity and discovery potential for different SBG scenarios are reported for both shower and track event analyses in the 100 GeV –100 PeV energy range.

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Collaboration

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other Collaboration

Subcategory

Experimental Results

Primary author: IDRISSE IBNSALIH, Walid (Università degli Studi Campania “Luigi Vanvitelli”)

Co-authors: SHARMA, Ankur (Uppsala University); Mr AMBROSONE, Antonio (Università di Napoli “Federico II”); Dr MARINELLI, Antonio (Università di Napoli “Federico II”); Prof. MIELE, Gennaro (University of Naples, Federico II); PISANTI, Ofelia (University of Naples Federico II); Dr MIGLIOZZI, Pasquale (INFN sezione di Napoli)

Presenter: IDRISSE IBNSALIH, Walid (Università degli Studi Campania “Luigi Vanvitelli”)

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