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Search for point sources with KM3NeT/ARCA and ANTARES neutrino telescopes

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In recent years, the adoption of a multi-messenger methodology within astrophysics has emerged as an innovative approach for enhancing our comprehension of the high energy Universe. Neutrino telescopes are crucial for highlighting hadronic component of these phenomena, testing known sources of gamma rays.
In this contribution, we present the combined analyses of the data collected by two neutrino telescopes located in the depths of the Mediterranean Sea. The ANTARES detector, operational for over 15 years off the coast of Toulon (France), and KM3NeT/ARCA, one of the two detectors constituting the next-generation neutrino telescope KM3NeT, optimized for astrophysical neutrinos exceeding 1 TeV in energy and presently collecting data while being under construction near Portopalo di Capo Passero (Italy). A list of approximately one hundred point-like and extended sources is subjected to scrutiny for neutrino emissions. This catalogue encompasses bright γ-ray emitters, galactic γ-ray sources displaying indications of a hadronic presence (TeVCat catalogue), such extragalactic sources as radio-loud AGNs and the most significant candidate sources studied by IceCube.

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