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Search for TeV emission from the base of the Fermi Bubbles with H.E.S.S.

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While the Fermi Bubbles were discovered about a decade ago by Fermi-LAT as a double-emitting lobe extending up to ~50° in latitude above and below the Galactic Center GC), their origin is still unknown. The H.E.S.S. collaboration is currently performing the first ever survey in TeV gamma rays of the Milky Way inner region: the Inner Galaxy Survey (IGS). The IGS is intended to achieve the best sensitivity to faint and diffuse emissions in a region of several degrees around the Galactic Centre. It provides an unprecedented sensitivity to dark matter signals, new diffuse emissions, and TeV outflows from the Galactic Centre. Understanding the properties of the Fermi Bubbles at low Galactic latitudes will provide key insights into their origin. We search for TeV emission at the base of the Fermi Bubbles using low-latitude spectral and spatial templates. The first results obtained with the 2014-2020 H.E.S.S. observations will be reported.

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Fermi Bubbles; Galactic Centre

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Subcategory

Experimental Results

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