EXPLORING THE POPULATION OF GALACTIC VERY-HIGH-ENERGY γ -RAY SOURCES

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ABOUT THE WORK

In this contribution we describe a model of the population of Galactic VHE γ -ray sources derived from the source sample of the H.E.S.S. Galactic plane survey catalogue.

MOTIVATION

Population models are essential to estimate the contribution of unresolved sources to the measured diffuse emission, especially at TeV energies where a large contribution is expected. Furthermore, they can be used as the basis for the optimisation of observation strategies and analysis techniques.

Work Done

We have developed a method for reconstructing model parameters that accounts accurately for the strong observational bias inherent in the sample of known sources.

Result

We have derived the properties of the Galactic population assuming a variety of plausible spatial distributions of sources and estimated the flux originating from as yet unresolved sources in the field of view of the HGPS.