

Unresolved gamma-ray sources.

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The contribution of unresolved gamma-ray point sources to the extragalactic gamma-ray background has been recently measured through analyses employing the statistical properties of observed gamma-ray counts. The contribution from each specific source class to the source-count distribution, such as blazars, misaligned Active Galactic Nuclei, or Star Forming Galaxies is affected by significant uncertainties, in particular in the unresolved flux regime. In this contribution we exploit the statistics of photon counts and the anisotropies of more than 10 years of Fermi-LAT data to probe extra-galactic gamma-ray source populations in different energy bands. We additionally discuss some results of the application of our statistical tool to galactic dark matter annihilating into gamma rays.

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