

The Fermi GeV excess: testing the point source interpretation

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A spatially extended excess of gamma rays collected by the Fermi-LAT from the inner region of the Milky Way has been discovered by different groups and with increasingly sophisticated techniques of data analysis. I will review the characterization of spectral and morphological properties of the excess when variations of the Galactic diffuse emission are properly taken into account. Recently, there has been strong support for a population of dim millisecond-pulsar-like sources being the dominant component of the excess emission. However, further evidence is needed.

I will discuss how it is possible to probe the contribution from unresolved point sources with current multi-wavelength observations, in particular at radio frequencies, and I will present prospects for future observatories [1].

[1] F. Calore, M. Di Mauro, F. Donato, F. Massaro and C. Weniger, In preparation.

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