

Indirect search for Dark Matter with Fermi from the Galactic Center

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The FERMI gamma ray satellite, previously known as GLAST, is in orbit, since June 2008. After a commissioning period is now delivering data.

The Large Area Telescope (LAT), onboard of FERMI, is the most sensitive gamma-ray detector to date, in the 20 MeV - 300GeV energy band.

It provides large effective collection area ($>8000\text{cm}^2@1\text{GeV}$), wide field of view ($>2\text{sr}$) and good energy resolution ($8\%@1\text{GeV}$).

FERMI data can be used for the indirect search for annihilating Dark Matter.

One of the possible observation strategy is the targeting of regions where high Dark Matter density is foreseen, such as the Galactic Center.

Galactic Center observation poses a challenge: to disentangle the possible Dark Matter signal from the bright gamma radiation of astrophysical sources.

A review on this searches will be given.

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