

Observations of Pulsar Wind Nebulae in Gamma-rays from GeV to TeV energies

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Since 2003, the continuous observations of the Galactic Plane by Atmospheric Cherenkov Telescopes, especially by H.E.S.S., have yielded the detection of more than 60 Galactic sources. Among them, Pulsar Wind Nebulae (PWNe) are the dominant class with more than 15 sources firmly identified.

In the GeV energy range, observations have been made possible through the launch of the Fermi-Large Area Telescope operating in the band between 20 MeV and 300 GeV. During its first 3 years of operation, it has detected high energy emission from several TeV PWNe, including the Crab Nebula, MSH 15-52, Vela or HESS J1825-137. In addition, upper limits derived on well-known PWNe have brought new constraints on the physical properties of these objects.

In this presentation, I will review the recent results obtained with the Fermi-LAT and the H.E.S.S. experiments and give a general overview of the gamma-ray population of Pulsar Wind Nebulae.

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