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Predictions of neutrino fluxes from Pulsar Wind Nebulae

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During the last years TeV emission has been detected from Pulsar wind nebulae. A new model by now has been developed explaining part of this emission by a hadronic component which consequently also predicts TeV neutrino emission. As galactic sources, many of the PWN are in direct view of the Antares neutrino telescope which can with its excellent angular resolution for several of the sources probe the emission, also considering the morphology of the sources. We use the IceCube non detection to put constraints on the fraction of TeV photons that might be contributed by hadrons and estimate the number of neutrino events that can be expected from these sources.

Biography

Irene Di Palma has completed her studies in Astrophysics from the University of Rome La Sapienza, a Fellowship at the Columbia University of New York and her PhD from the Max Planck Institute for Gravitational Physics in Hannover. After the first Post-doctoral studies from the Max Planck in Golm, Berlin, she is now a Researcher at the University of Rome, La Sapienza. She has published more than 25 papers in reputed journals and has been serving as an Editorial Board Member of repute.

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