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Seeking the Link Between Icecube High-energy Neutrinos and the Unresolved Gamma-ray Background MICHELA NEGRO, University of Maryland, Baltimore County, FERMI-LAT COLLABORATION — The new era of the multimessenger Astrophysics has begun. The first step required to enable this science is to identify the multimessenger sources. Of particular interest is the relation between the high-energy neutrino events detected by IceCube Observatory and the γ -ray emission from extra-galactic objects. Despite the effort devoted to finding a clear γ -ray counterpart to astrophysical neutrinos, and the recent evidence of a neutrino event counterpart found in the blazar TXS 0506+056, the connection is still uncertain. The studies carried out so far focus on sources resolved by the Fermi Large Area Telescope (LAT), neglecting the numerous sources too faint to be individually resolved. In our analysis we consider the Fermi LAT unresolved emission at high latitude, whose fluctuation field is known to be produced by blazars, to investigate the contribution of unresolved blazars to the astrophysical neutrino flux.

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