

Diffuse Neutrino Flux from Jetted AGN

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Active galactic nuclei (AGN) with relativistic jets powered by accretion onto their central supermassive black hole are the most powerful persistent sources of electromagnetic radiation in the Universe, with bolometric luminosities of $\sim 10^{43} - 10^{48} \text{ erg s}^{-1}$. Jetted AGN are promising cosmic ray accelerators and have abundant radiation fields for the production of high-energy neutrinos. As a result, they have been suggested as possible neutrino sources long before the discovery of an astrophysical neutrino flux by IceCube. In light of observational constraints and the recent neutrino detections associated with the blazar TXS 0506+056, I am going to provide an overview of theoretical predictions for the diffuse neutrino flux from jetted AGN.

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