

PROSPECTS FOR DETECTING HIGH-ENERGY NEUTRINOS FROM BLAZARS

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We discuss hadronic models for blazars and prospects for detecting blazar neutrino emission with 1 km^2 neutrino arrays. The observed spectral fluxes and variability time scales of synchrotron and Compton radiation from blazars, such as 3C 279 and Mrk 421, are used to determine physical parameters of the emission regions. Assuming the acceleration of power-law energetic protons with spectral parameters limited by the confinement time scale, we calculate spectral luminosities of π -meson decay neutrinos and gamma rays within the framework of photohadronic models. Based on these results, we reconsider the fluxes of neutrinos from point sources and their potential contribution to the diffuse neutrino background.