NEUTRINO EMISSION FROM HBLS AND LBLS

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The Synchrotron Proton Blazar model is a promising model to explain TeV-emission from γ-ray loud BL Lac objects like Mkn 501. In contrast to leptonic models, the hadronic explanation of γ-ray emission predicts ultrahigh energy neutrinos. Here we present the predicted neutrino spectra from typical High-energy BL Lac Objects (HBLs) and Low-energy BL Lac Objects (LBL), and their contribution to the diffuse neutrino background. For our calculations we use a Monte-Carlo method and utilize the recently developed SOPHIA code for the photohadronic event generation.