

SEARCH FOR CASCADE-LIKE EVENTS IN THE AMANDA-B10 DETECTOR

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The signature for the reaction of high energy electron neutrinos in the AMANDA detector are isolated cascades. One advantage of this channel, when searching for extraterrestrial high energy neutrinos, is the lower background of atmospheric electron neutrinos as well as the better energy resolution relative to the muon neutrinos. Data taken in 1997 with the AMANDA-B10 detector was searched for events with a cascade-like signature. The observed events are consistent with expected background from atmospheric neutrinos and bremsstrahlung from atmospheric muons. The limit set on the diffuse flux of electron neutrinos (and electron anti-neutrinos) is currently the best available in the energy range 1-100 TeV.