SEARCH FOR A DIFFUSE FLUX FROM SOURCES OF HIGH ENERGY NEUTRINOS WITH AMANDA-B10

G. Hill, for the AMANDA Collaboration

Department of Physics, University of Wisconsin-Madison, 1150 University Ave., Madison, WI 53706.

ghill@alizarin.physics.wisc.edu

We report the results of a search for a diffuse flux of high energy muon-neutrinos from extraterrestrial sources. We use data collected with the AMANDA-B10 detector during austral winter 1997. No high energy events are found in excess of those expected from neutrinos produced by cosmic ray interactions in the earth's atmosphere. We therefore place upper limits on extraterrestrial neutrinos. The implications for models of neutrino production will be discussed.