

## **THE AMANDA SEARCH FOR HIGH ENERGY NEUTRINOS FROM GAMMA-RAY BURSTS**

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If gamma-ray bursts (GRBs) accelerate protons as well as electrons, they may be the source of the highest energy cosmic rays. Detection of neutrinos from GRBs would confirm hadronic acceleration. AMANDA uses the Antarctic ice shelf as a Cherenkov medium for detecting such high energy neutrinos. We searched data recorded during 1997 for neutrinos coincident with northern hemisphere GRBs detected by BATSE. BATSE provides the time and location information that reduces the background of atmospheric neutrinos, from which the high energy neutrinos must be separated. Quality cuts reduce the number of misreconstructed muon tracks, resulting in a nearly background-free search. A total of 126 GRBs were studied: 78 bursts detected by the BATSE on-board trigger and 48 bursts found in BATSE archived data. The search result is consistent with no signal, and we place an upper limit on the neutrino flux from GRBs. Preliminary results from 1998 data will also be presented.