

DESY Seminar

11 January 2005, 17:00, DESY Hörsaal

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*Search for High Energy astrophysical
neutrinos
with the AMANDA detector at the South
Pole*

The AMANDA-II detector has been built at the South Pole between 1996 and 2000. AMANDA is currently the largest neutrino telescope in operation. It consists of 677 optical modules located at depths between 1500 and 2000 m below the Antarctic ice surface. The clear polar ice is used as detection medium for the Cherenkov light produced by charged products of neutrino interactions.

In this talk recent results on the search for high energy neutrinos of extraterrestrial origin will be presented. This includes the search for a diffuse flux, for neutrinos from Gamma Ray Burst and from point sources. Major progress was achieved in this last subject, and particular emphasis will be dedicated to the corresponding results. The characterization of the detected atmospheric neutrinos as calibration source will also be demonstrated.

- Tea and cookies will be served at 16:45 in the lobby.
- After the seminar there is a chance for private discussions with the speaker over wine and pretzels also in the lobby.