30th International Cosmic Ray Conference



Contribution ID: 1103 Type: Oral

Diffuse high-energy neutrino searches in AMANDA-II and IceCube: results and future prospects

Thursday, 5 July 2007 09:35 (0:12)

Abstract content

The AMANDA-II data collected during the period 2000-03 have been analysed in a search for a diffuse flux of high-energy extra-terrestrial neutrinos from the sum of all sources in the universe. With no excess of events seen, an upper limit on an E-2 flux of E2 Phi $< 8.8 \times 10$ -8 GeV cm-2 s-1 sr-1 was obtained. The astrophysical implications of this bound and of others obtained for specific models will be discussed. The first results from analysis of the IceCube 9 string detector and prospects for the current 22 string detector will be presented.

If this papers is presented for a collaboration, please specify the collaboration

IceCube

Summary

Reference

Proceedings of the 30th International Cosmic Ray Conference; Rogelio Caballero, Juan Carlos D'Olivo, Gustavo Medina-Tanco, Lukas Nellen, Federico A. Sánchez, José F. Valdés-Galicia (eds.); Universidad Nacional Autónoma de México, Mexico City, Mexico, 2008; Vol. 5 (HE part 2), pages 1449-1452

Primary author(s): HILL, Gary (University of Wisconsin, Madison); HODGES, Jessica (University of Wisconsin, Madison); HOSHINA, Kotoyo (University of Wisconsin, Madison)

Presenter(s): HILL, Gary (University of Wisconsin, Madison); HODGES, Jessica (University of Wisconsin, Madison); HOSHINA, Kotoyo (University of Wisconsin, Madison)

Session Classification: HE 2.3

Track Classification: HE.2.3