Contribution ID: 534 Type: Talk

Solar Atmospheric Neutrinos searches with ANTARES neutrino telescope

Friday 16 July 2021 12:24 (12 minutes)

The interaction of cosmic-rays with the solar atmosphere can yield neutrinos as final state particles. These neutrinos are expected to be mainly produced at the surface of the Sun and to be absorbed in the inner part.

Solar Atmospheric Neutrinos represent an irreducible source of background to solar dark matter searches, and its detection would be important in the characterization of the background.

The deep-sea neutrino telescope ANTARES, located in the Mediterranean Sea, is well suited to perform this search. In this work, 11 years of ANTARES data have been analysed and the resulting sensitivities are presented.

Keywords

ANTARES, Neutrino Telescopes, Dark Matter

Collaboration

Antares

other Collaboration

KM3NeT

Subcategory

Experimental Results

Primary author: LOPEZ-COTO, Daniel (ANTARES/KM3NeT)

Co-authors: Prof. NAVAS, Sergio (University of Granada); ZORNOZA, Juande (IFIC (CSIC-UV)); FOR THE

ANTARES COLLABORATION

Presenter: LOPEZ-COTO, Daniel (ANTARES/KM3NeT)

Session Classification: Discussion

Track Classification: Scientific Field: NU | Neutrinos & Muons