

First Data from the Commissioned ICARUS Side Cosmic Ray Tagger

The ICARUS detector will operate at shallow depth and therefore it will be exposed to the full surface flux of cosmic rays. This poses a problematic background to the electron neutrino appearance analysis. A direct way to suppress this background is to surround the cryostat with a detector capable of tagging incident cosmic muons with high efficiency (~95%). A cosmic ray tagger (CRT) consists of an organic plastic scintillator, wavelength-shifting fibers, readout by silicon photomultipliers and multi-anode photomultiplier tubes. The installation of the ICARUS Cosmic Ray Tagger (CRT) side wall hardware is complete and commissioning of the system is underway. In this talk, I will present the status of the integration of the CRT readout and analysis of first data from the commissioned side CRT system.

Working group

WG6

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