

New read-out electronics for the TPC wires of the ICARUS detector

Authorship annotation

for the ICARUS collaboration

Session and Location

Monday Session, Poster Wall #120 (Auditorium Gallery Left)

Abstract content

The ICARUS T600, a liquid argon time projection chamber (LAr-TPC), underwent a major overhauling at CERN, in 2016-2017, which included also a new design of the read-out electronics, in view of its operation in Fermilab on the Short Baseline Neutrino (SBN) program from 2019. The new more compact electronics showed capability of handling more efficiently also the signals in the intermediate Induction 2 wire plane with a significant increase of S/N, allowing charge measurement. The new front-end and the AD conversion (ADC) system are presented together with the results of the tests on 50 liters liquid argon TPC performed in CERN with cosmic rays.

Poster included in proceedings:

yes

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