

Abstract Submitted  
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**Characterization of Gaseous-Ar Operations of the ALICE TPC for the DUNE near detector** MATTHEW JUDAH, University of Pittsburgh, DUNE COLLABORATION — The DUNE near detector complex will include the ND-GAr detector, which has a high-pressure gaseous argon time projection chamber (HPgTPC) at its heart. The HPgTPC for the DUNE experiment will consist of the central tracking detector from the ALICE experiment at the Large Hadron Collider. One of ALICE's Inner ReadOut Chambers (IROC) is in a test stand based at Fermilab and one of the Outer ReadOut Chambers (OROC) is being tested at RHUL. Both IROC and OROC are standard multiwire proportional chamber used for amplifying the small gas signal via further ionization of the primary ionization electrons through avalanche formation. It is essential to have a detailed understanding of the characteristics of these readout chambers using the planned operating conditions in the DUNE near detector complex. This presentation aims to illustrate the progress towards the characterization the electron transport and signal readout of this test stand detector using simulation and data from a  $^{55}\text{Fe}$  calibration source.

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