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### 2 LAr characterization

2.1 Cryogenics/cryostat, T,P working conditions, T gradient from T vertical probes, heat load, purity level (from PurMon)

### 3 TPC characterization

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- 3.2 Channel-to-channel variation (gain) from test Pulse

# 4 PhDet characterization

4.1 Single PE calibration

# 5 TPC Response

- 5.1 Space charge map: distortion, drift velocity, E-field
- 5.2 dQ/dx -> dE/dx from cosmic stopping muons, beam protons, beam muons and beam pions
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- 6.1 Detector(s) Efficiency (PE/Ph)
- 6.2 Detector Light Yield: signal reconstruction at a reference momentum setting for a given selected particle (eg. electrons) from sum of all PD modules

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- Summary of the protoDUNE detector performance paper
  - Still work in progress
- General paper content has been agreed with the DUNE spokes and DUNE analysis coordinators
  - Prepare a first draft based on the plots we currently have, but many of the plots need to be updated (more stats, SCE maps, new MC...)

• Target is JINST

7 Conclusions

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