Calibration and Cryogenic Instrumentation Consortium: Interfaces

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LIP
LABORATÓRIO DE INSTRUMENTAÇÃO
E FÍSICA EXPERIMENTAL DE PARTÍCULAS

Interface Calibration/Cryostat

- What are the pressure-rating tests/standards that the CALCI ports need to pass in order to be installed?
- Is there a maximum acceptable He leak rate for the cryostat ports?
- Are there estimates of maximum cryostat ceiling movement due to pressure swings?
- Is it possible to remove cryostat insulation on the side walls, in order to locate the neutron source there? The weight can be carried by the cryostat structure naturally

Interface Calibration/Infrastructure

- Is there the possibility to remove mezzanine floor sections directly above the calibration ports, to facilitate laser calibration system installation?
- Can we use building ground for the laser calibration racks? (to avoid introducing noise in the TPC electronics)

Interface Calibration/HV

- If/when we retract the laser periscope (plastic), what is the minimum distance we need to leave between the laser periscope and the field cage?
- Can we have electric cables routed in the region between the FC and the ground plane? What is the minimum distance we should leave w/r to the FC? (or in other words, at what voltage is it acceptable to route cables?)

Interface Calibration/APA

- Define exactly where the PE laser fibers can couple in the APA structures (only at the top).
- Routing of fibers to ports

Interface Calibration/CE

- Cable trays might interfere with the laser periscopes, if they are moved from the existing planned locations.
- Might need to be made narrower close to the periscopes.

Interface Calibration/DAQ

- Communication CAL - DAQ just one way (from DAQ to CAL) or two ways (back and forth) ?
  - the point would be to provide info on where the laser is pointing