

Cryogenics and TPC update

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On the behalf of the Napoli group

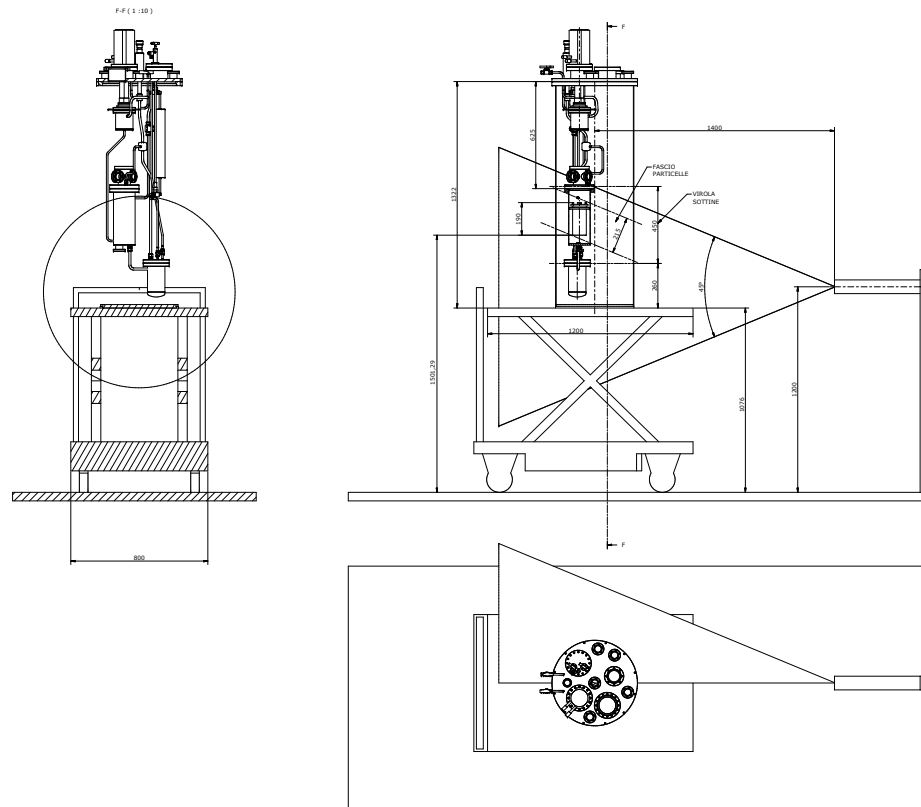
RED bi-weekly meeting – 19 April 2016

Cryogenics (2/2)

1. Fix the position of the TPC wrt the neutron source
2. Choose the best system to move the cryostat along the vertical direction

NEEDS:

1. Z “Vertical” position range (angles wrt the beam line)
2. XY position range
3. TPC distance from the source
4. nTOF detectors from the source
5. Do we have to move TPC and nTOF with the same system? If yes, we need to have a preliminary idea on how to make the nTOF structure



TPC status

- All the parts of the TPC are collected (but the cryostat and photodetectors)

Next Steps:

1. Refurbishment of the old ICARUS cryostat for preliminary test (A. Manna)
 1. Cleaning - done
 2. Feed-throughs – on going
2. Vacuum in the insulation layer of the cryostat (on going – A. Manna)
3. Assembly of the TPC with the “old” front-end readout board for SensL SiPM
4. First test will be performed with the old SensL C-series array
5. **Goal of the first test:** mechanical robustness of the TPC, HV, purity (to see S2 signals)
6. Optimization of the new readout board with the SensL-J series array (simulations on going – P. Trinchese)



Stay tuned more to come soon

OrCAD simulation of SensL MicroC-60035 SiPM

