Internal note on the DS20k calibration system

The current version (26.11.2020) of the note is available at this <u>link</u>:

Purpose of the calibration system

The baseline design (from beginning of 2020)

Detailed simulation study

Foreseen evolution of the system

Annexe: full details of the simulation study

The purpose of the note is to collect in a single document the motivations, the specifications, the technical details about the calibration system. It will evolve until all parameters are fixed.

Questions/Next

Position of the tubes vs the TPC walls, Veto: need TPC CAD to be integrated

Calibration with electrons/photons below the TPC: TPB thickness

DD-gun and sources: finalise the pipe system (diameter)

Readout segmentation: any impact on the calibration system?

Details on the motor boxes (components, layout) and glove boxes to be added

Next

- 1. Note was sent out end of November to the authors; no feedback. Is any feedback expected?
- 2. Make this version of the note as a first version which will evolve and store it in an official repository (doc-db?)?
- 3. Update it regularly (six months?) or when a decision is taken.

14.01.2021