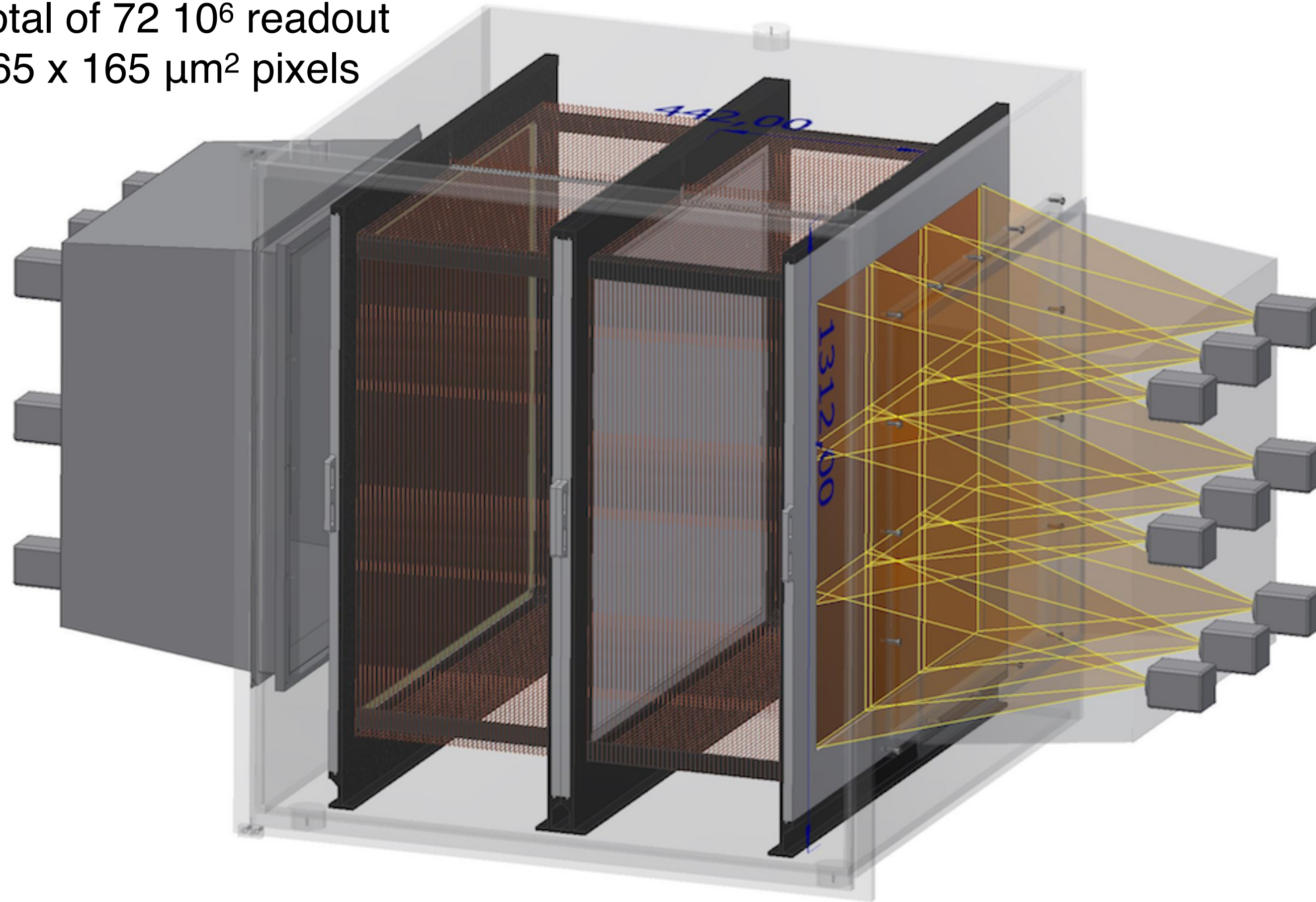
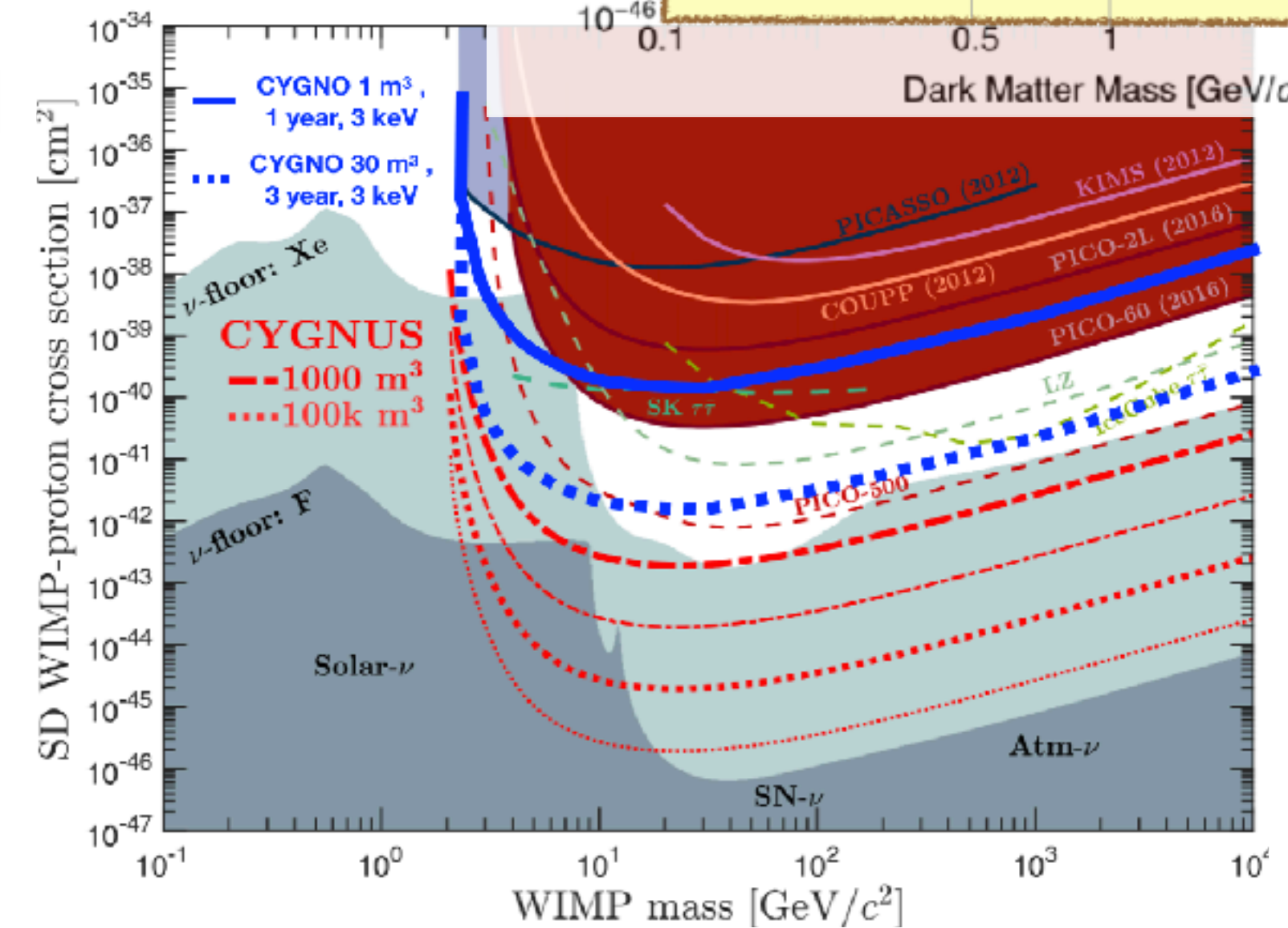
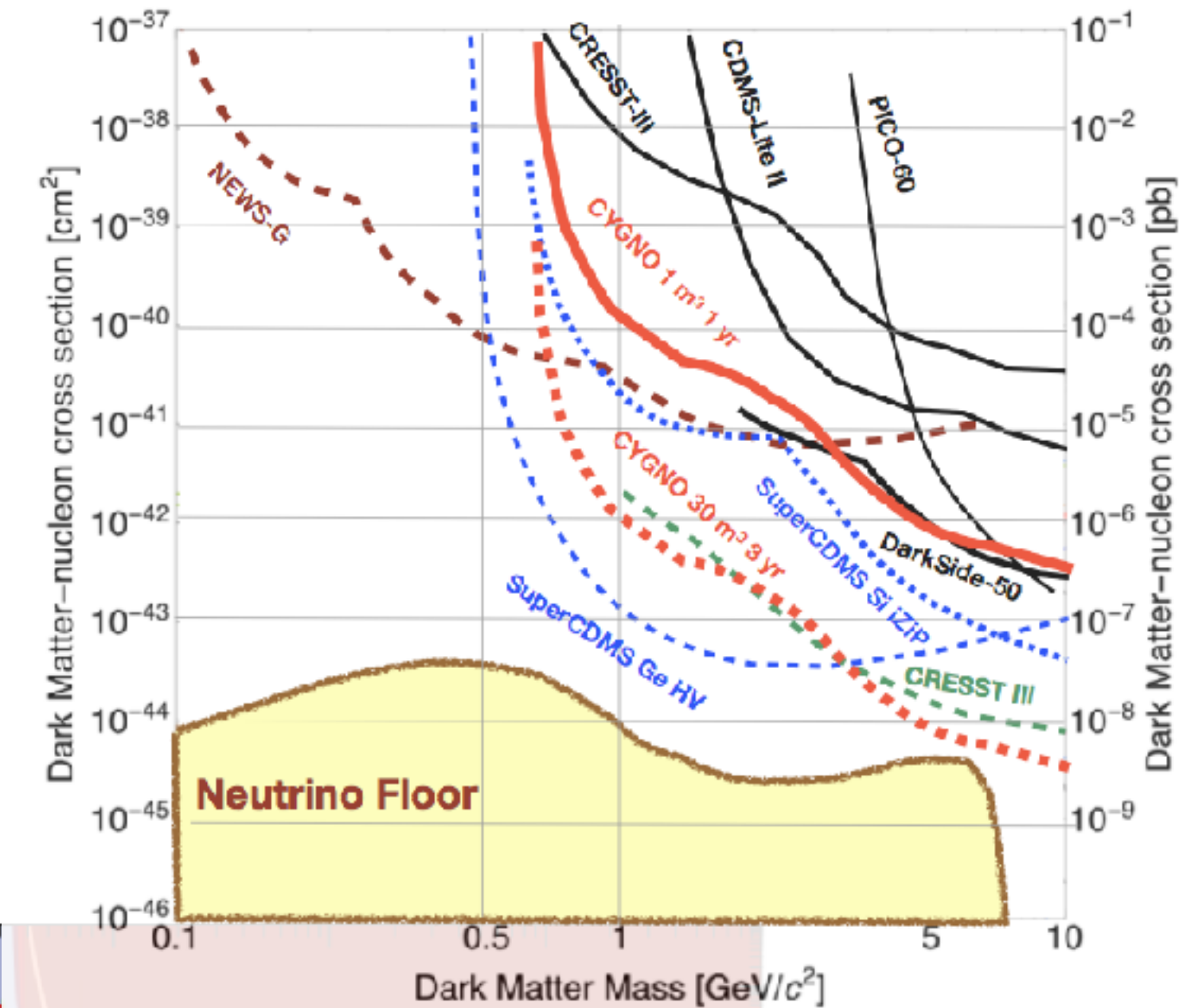


CYGNO Detector

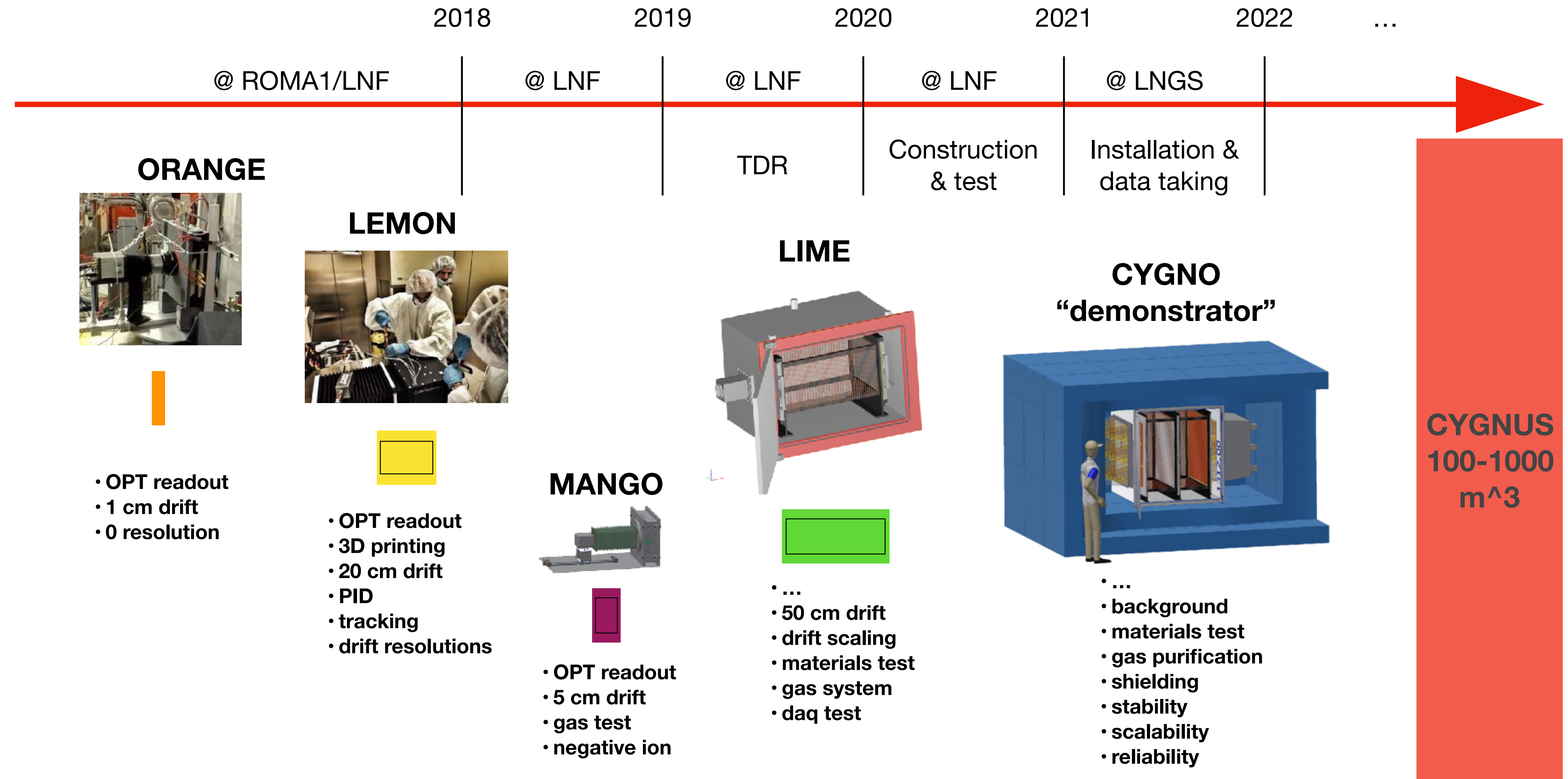
A total of 72×10^6 readout
 $165 \times 165 \mu\text{m}^2$ pixels



18 cameras monitoring
 330×330 mm each
 with **160 μm** resolution and
 a sensitivity of $\sim 1 \text{ ph} / 20 \text{ eV}$ released in gas



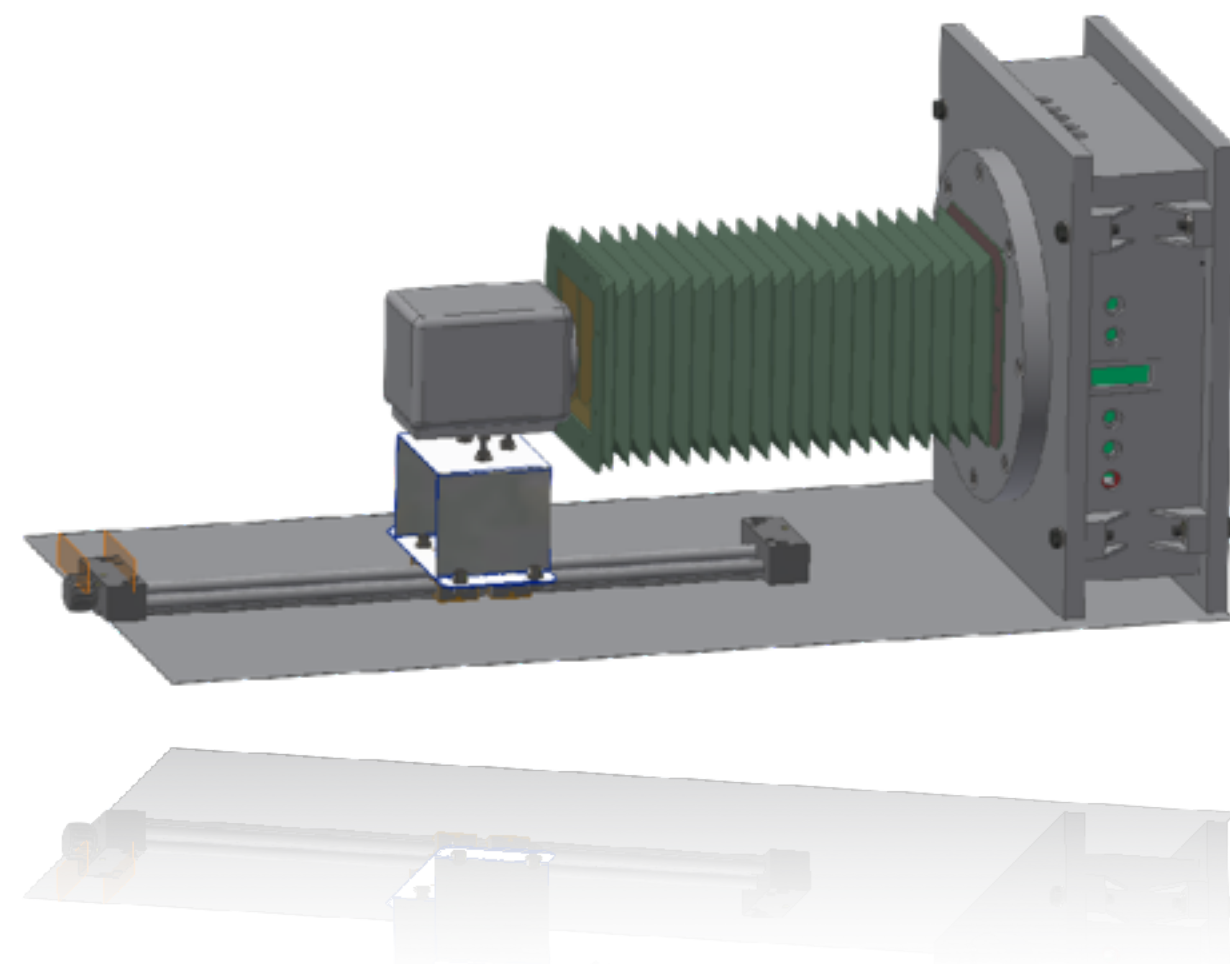
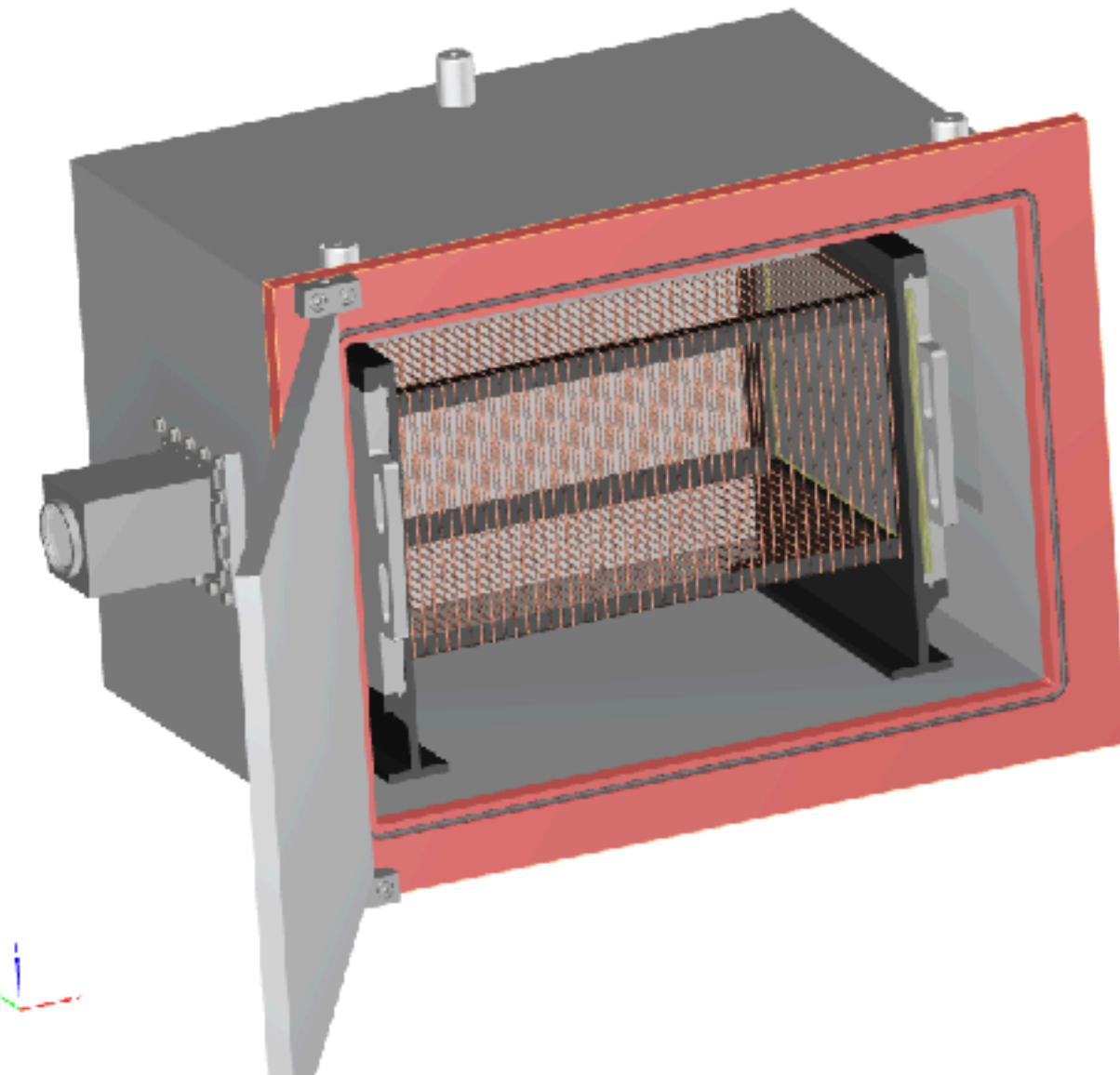
CYGNO Roadmap @ LNGS



in the meantime... LIME & MANGO

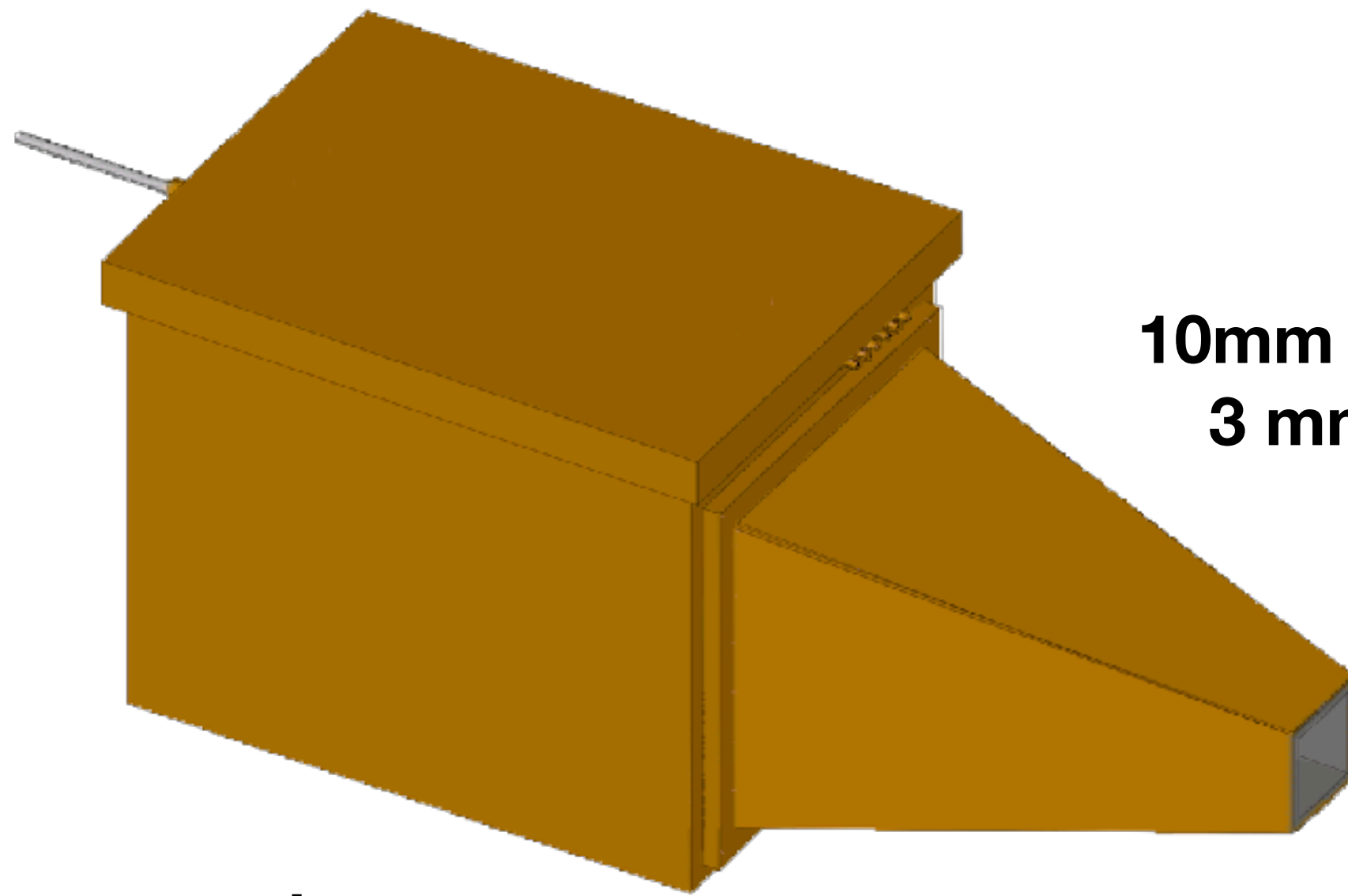
LIME: Long Imaging ModuleE

- **50 cm** long drift gap, 25 litre sensitive volume
- studied material choice
- performing a detailed study, minimisation and simulation of **radioactive background**;
- **gas** re-circulation and purification.
- optimisation of **PMT/SiPM** readout and trigger.
- HV Test

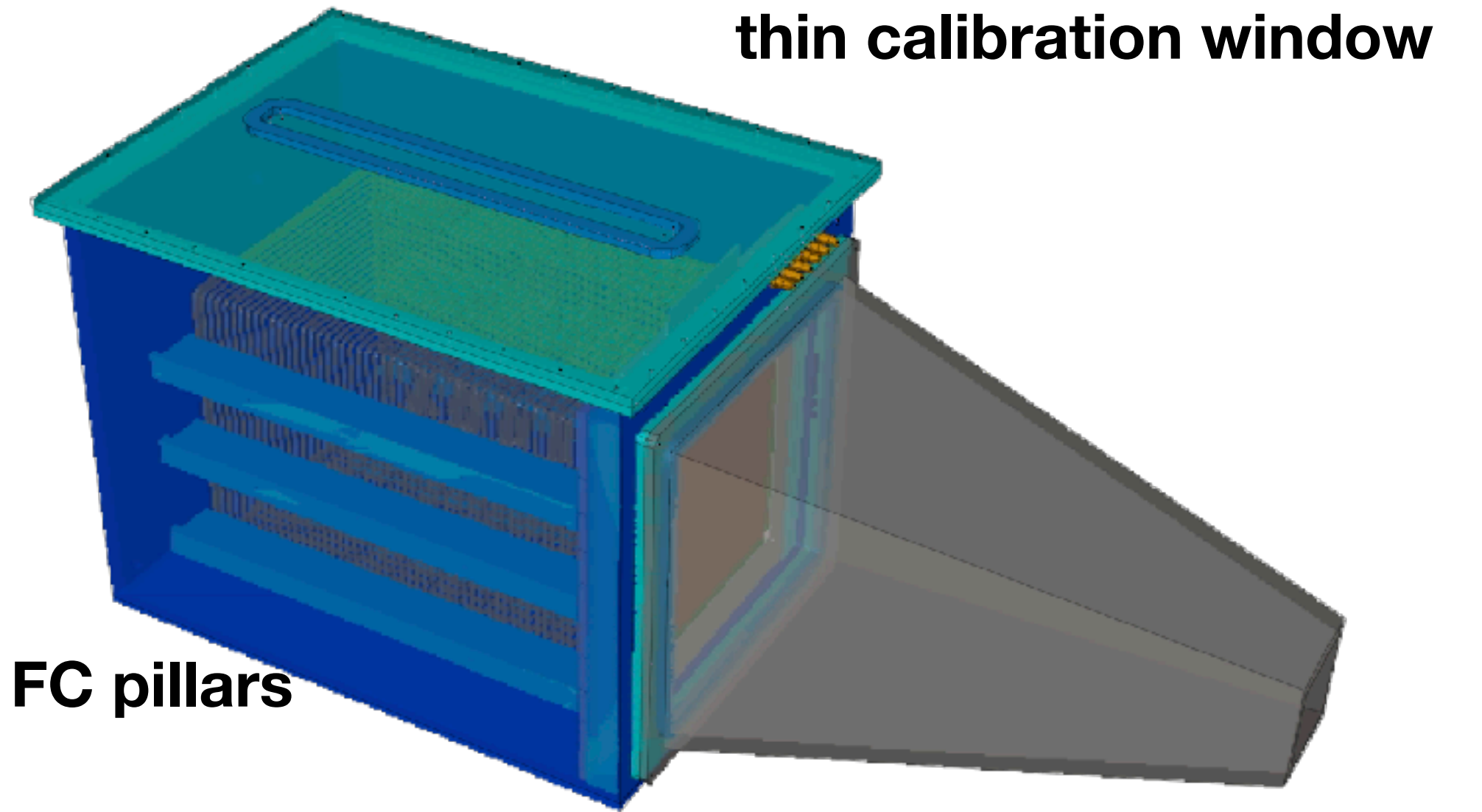


MANGO - Multipurpose Apparatus for Negative ion studies with GEM and Optical readout

- 5 cm drift gap
- THGEM test
- 4 GEM test (lower HV with the same gain)
- **Negative Ion test**



**10mm PMMA
3 mm Cu**

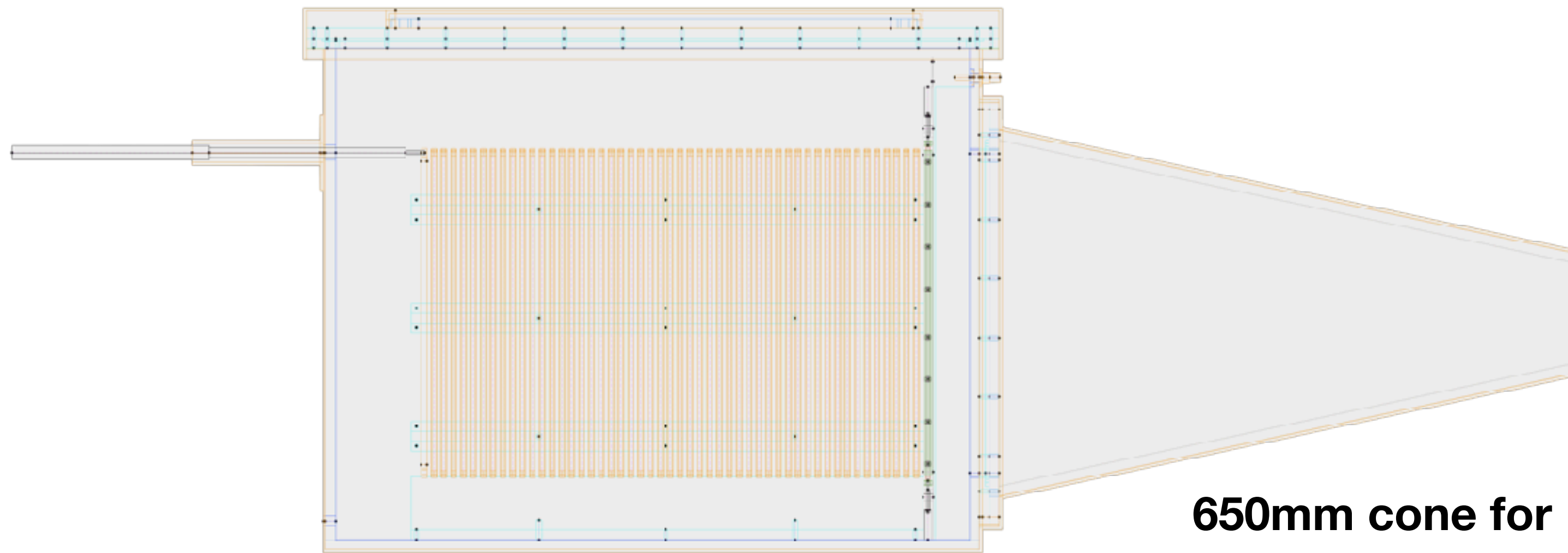


thin calibration window

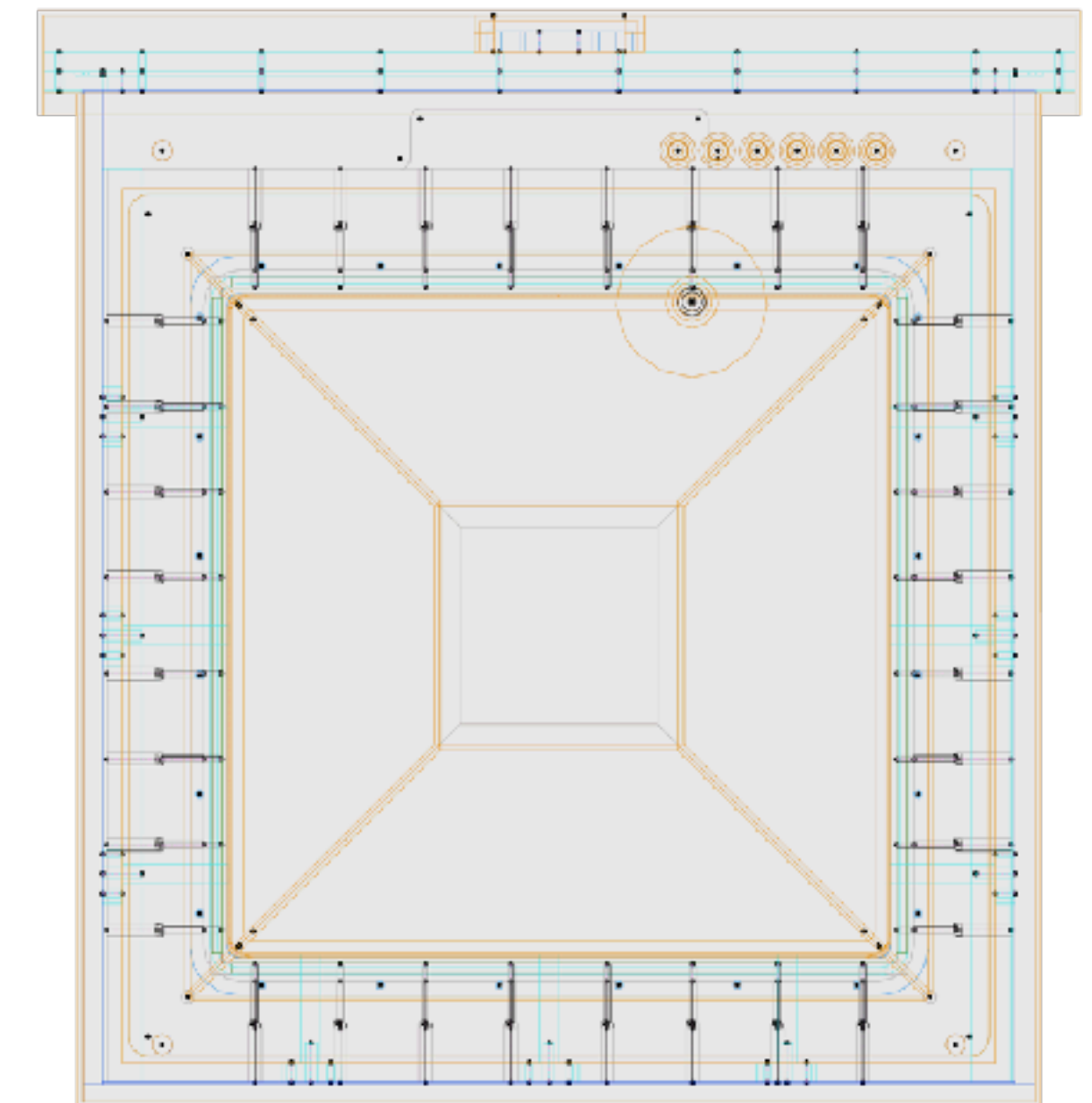
FC pillars

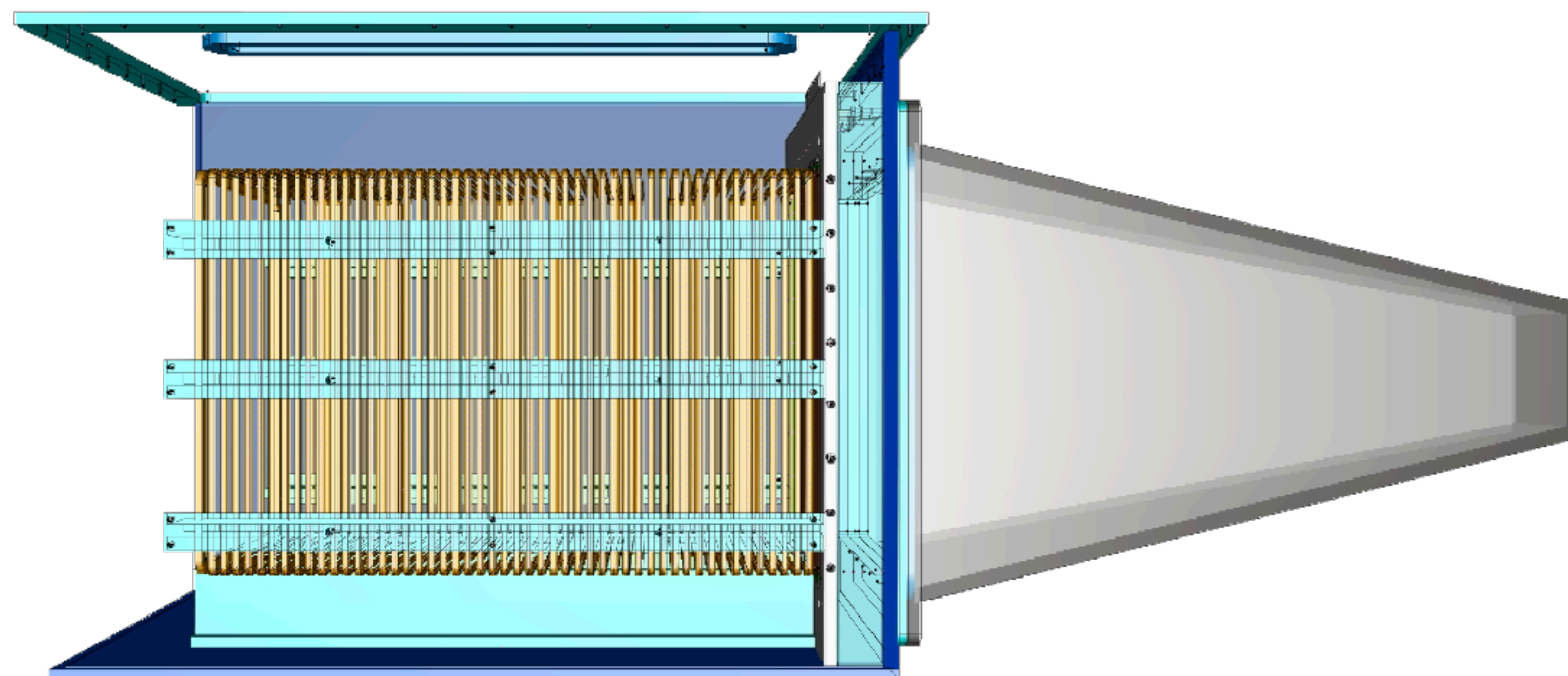
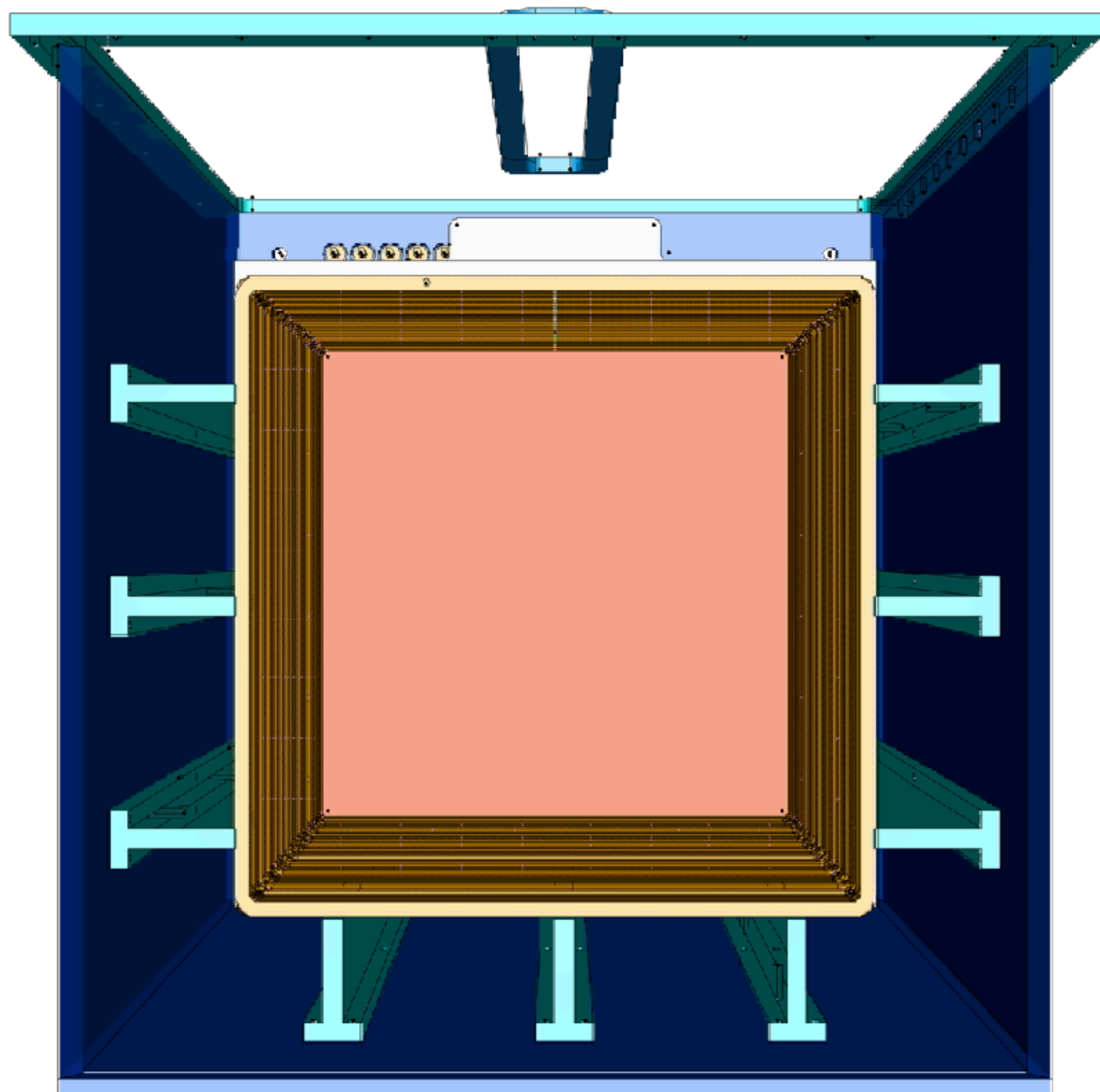
**FC 49*6mm Cu square ring
50kV, FT, cathode frame**

**33*33mm triple GEM
frame**



**650mm cone for
opt readout**





TDR

https://docs.google.com/document/d/1puVlyFf_rTPycZ3JyVlrL3FXB9kRLEKvv3Rpszid74
Ms/edit