

# Updates on the preparation of PDE measurement of the VD-XA

**PhColl Meeting**

11/07/2023

F. Di Capua on behalf of Napoli group



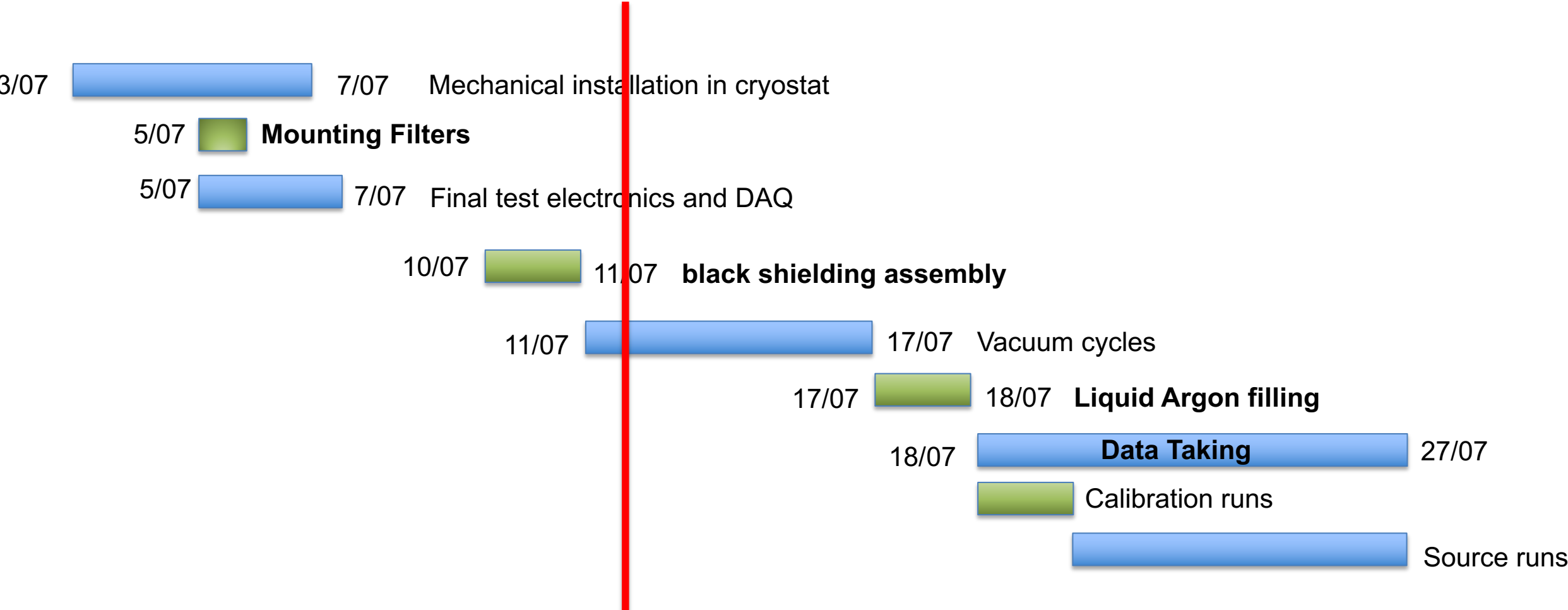
UNIVERSITÀ DEGLI STUDI  
DI NAPOLI FEDERICO II



## Main Parts procurement

- XA-VD assembled with flex board (FBK SiPMs) and flex cables received since April
- Mid of June: cold and warm electronics was ready for Naples test
- Evaporated filters shipped to Naples by end of JUNE

# PDE Test Schedule

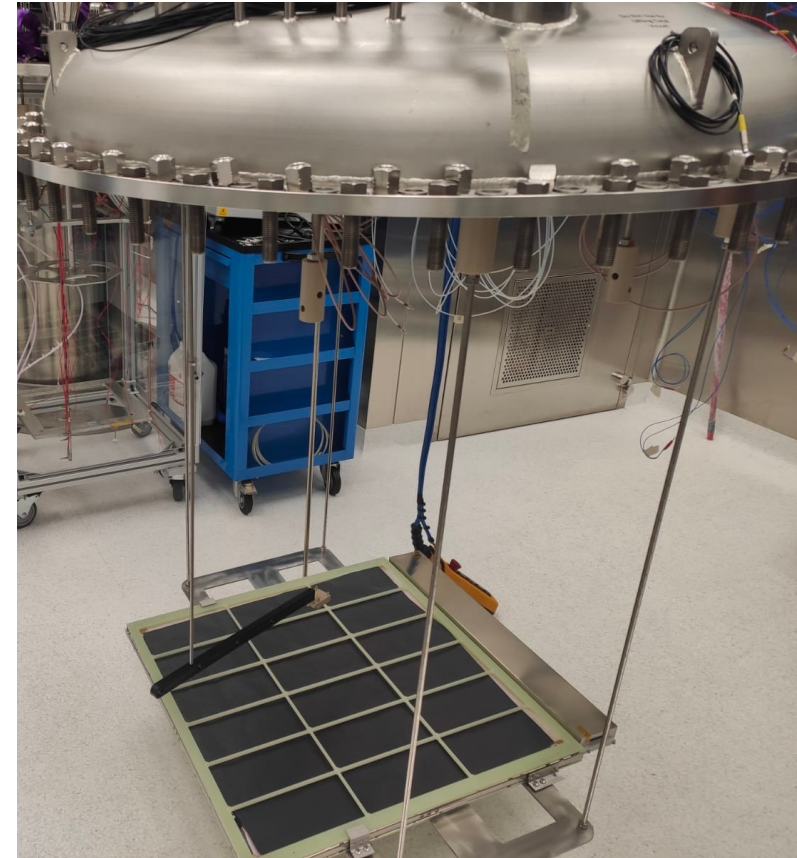
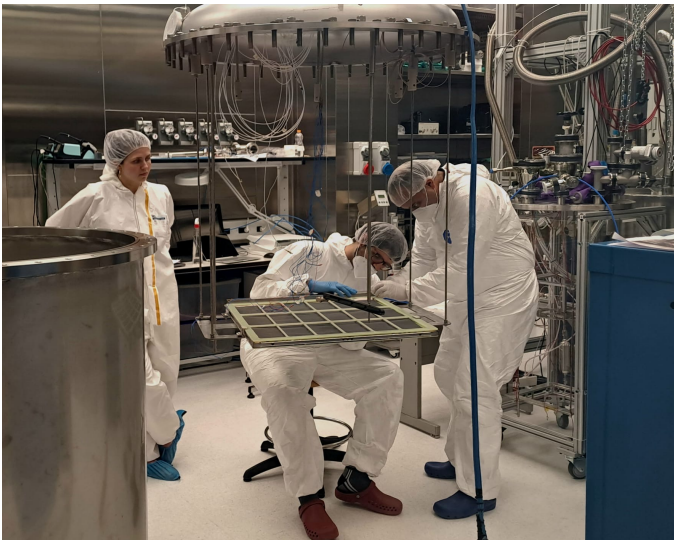


data analysis will starts with data taking to produce a preliminary result by the end of July

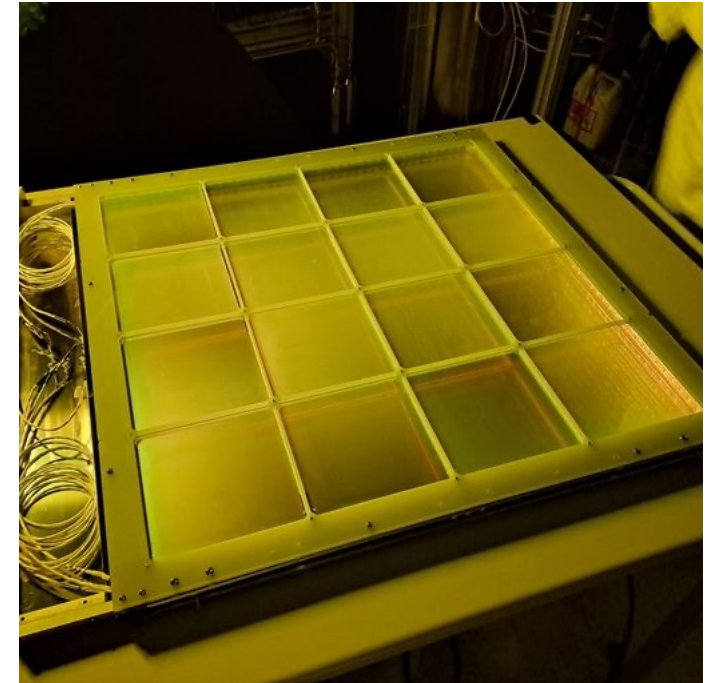
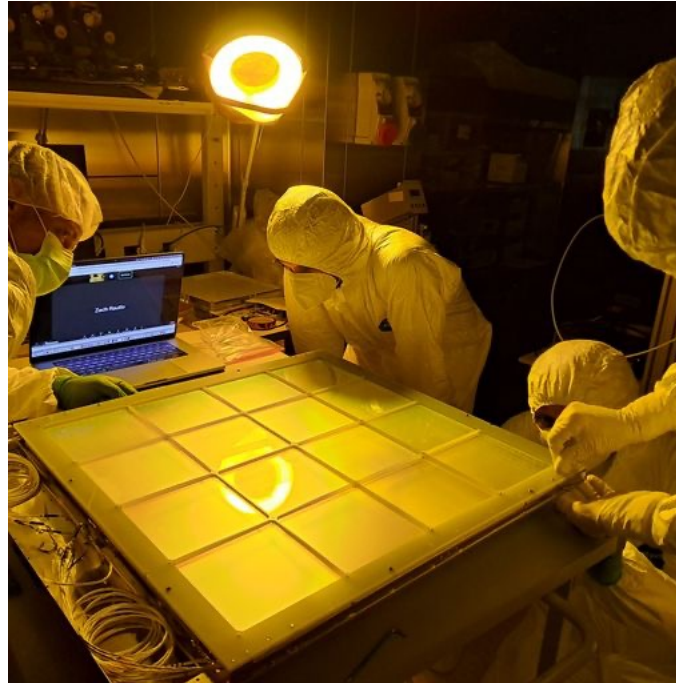
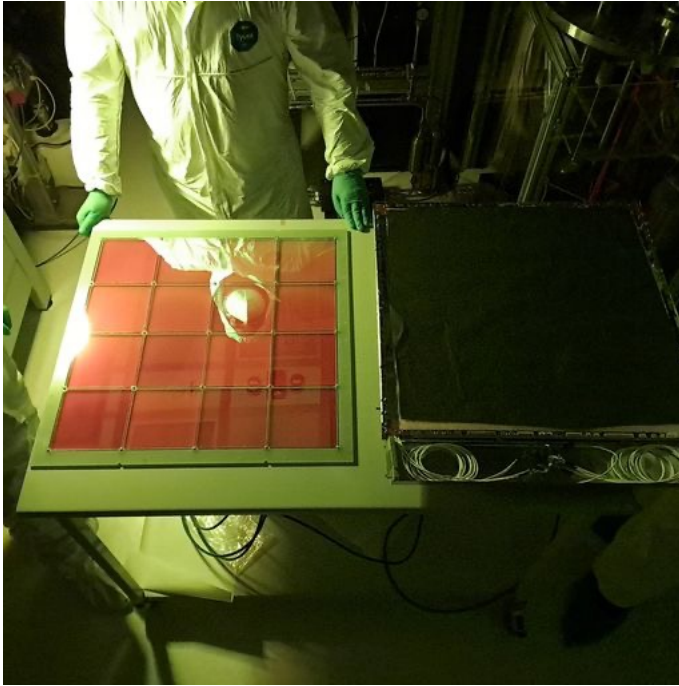
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# Mechanics: assembly test

- Mechanical frames and all parts washed before to be installed
- Source manipulator and source holder tested
- Filters mounted
- **Delay in black shielding delivery**

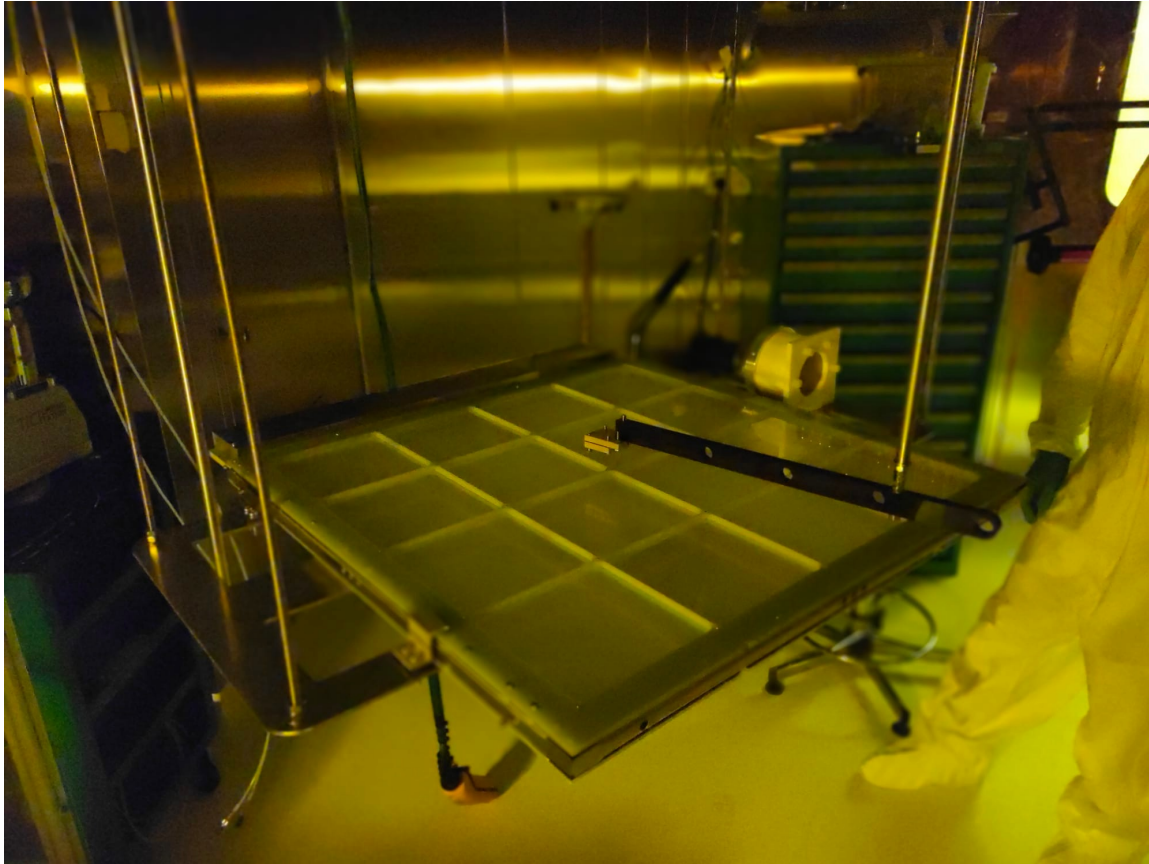


## Filter assembly



All light source shielded with UV absorber foils

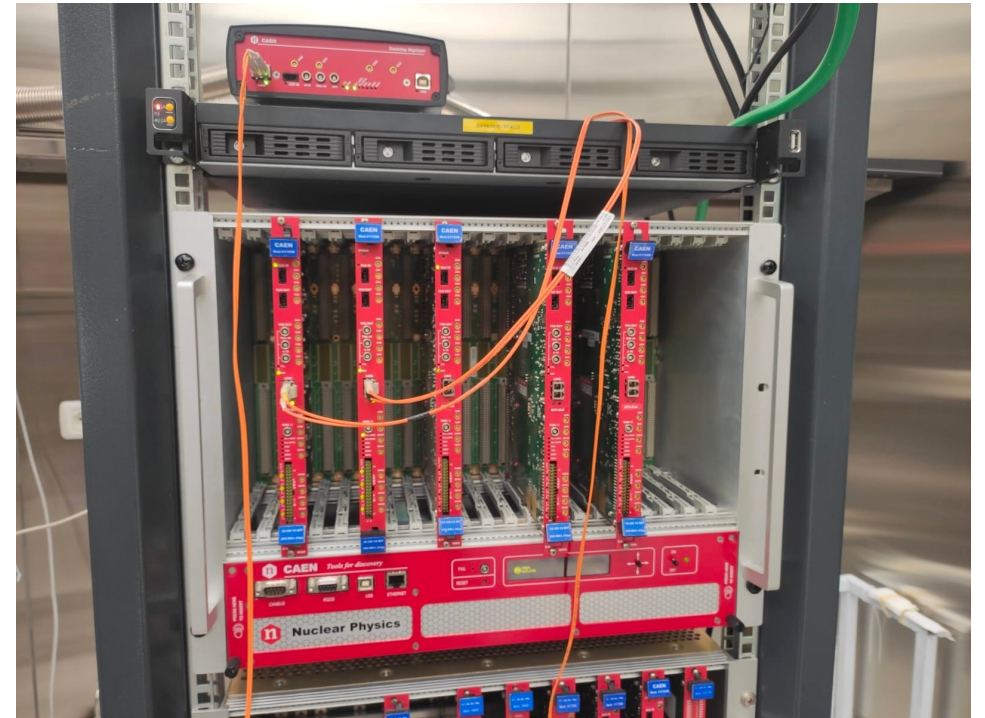
# Megacell deployment in the cryostat



- Final electronic test before to start vacuum operations

# DAQ

- DT5751 CAEN digitizer (1 Gs/s 8 bit)
- V1725 digitizers (250 ms/s 14 bit)
- Four channel LeCroy oscilloscope
- MIDAS interface software for sequential data acquisition runs
- Slow control: LAr level, temperature and pressure monitored with NI PXI



# PDE Test Simulation

- A. Machado and G. Valdivieso are taking care of the simulation of the PDE test
- Cryostat, XA-VD and source geometry implemented
- Normalization number of the number of scintillation photons will be available by the start of data taking
- Fine effects will be included in the following

