

# 2025 Cosmic Rays setup

G-RWELL and Large Area CS detectors

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# Setup @LNF INFN

Detectors involved:

- 4 G-RWELL (10 x 10 cm<sup>2</sup>)
- 2 CS large area (40 x 46 cm<sup>2</sup>)

Trigger system:

- Plastic Scintillators (45 x 45 cm<sup>2</sup>)

High Voltage Distribution:

- 20 channels

Acquisition system:

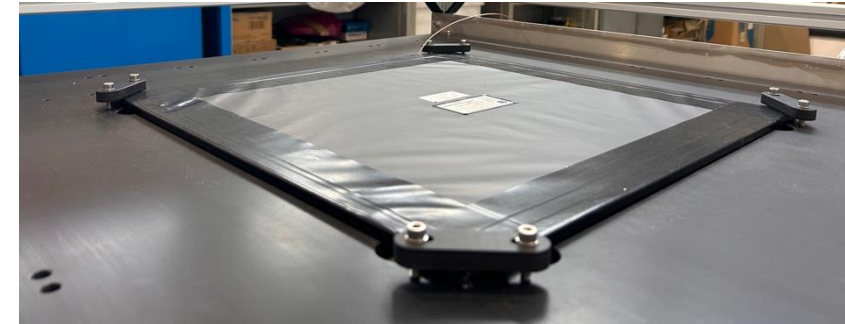
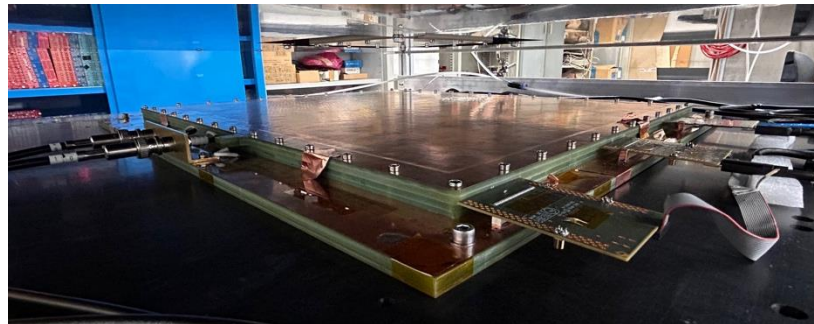
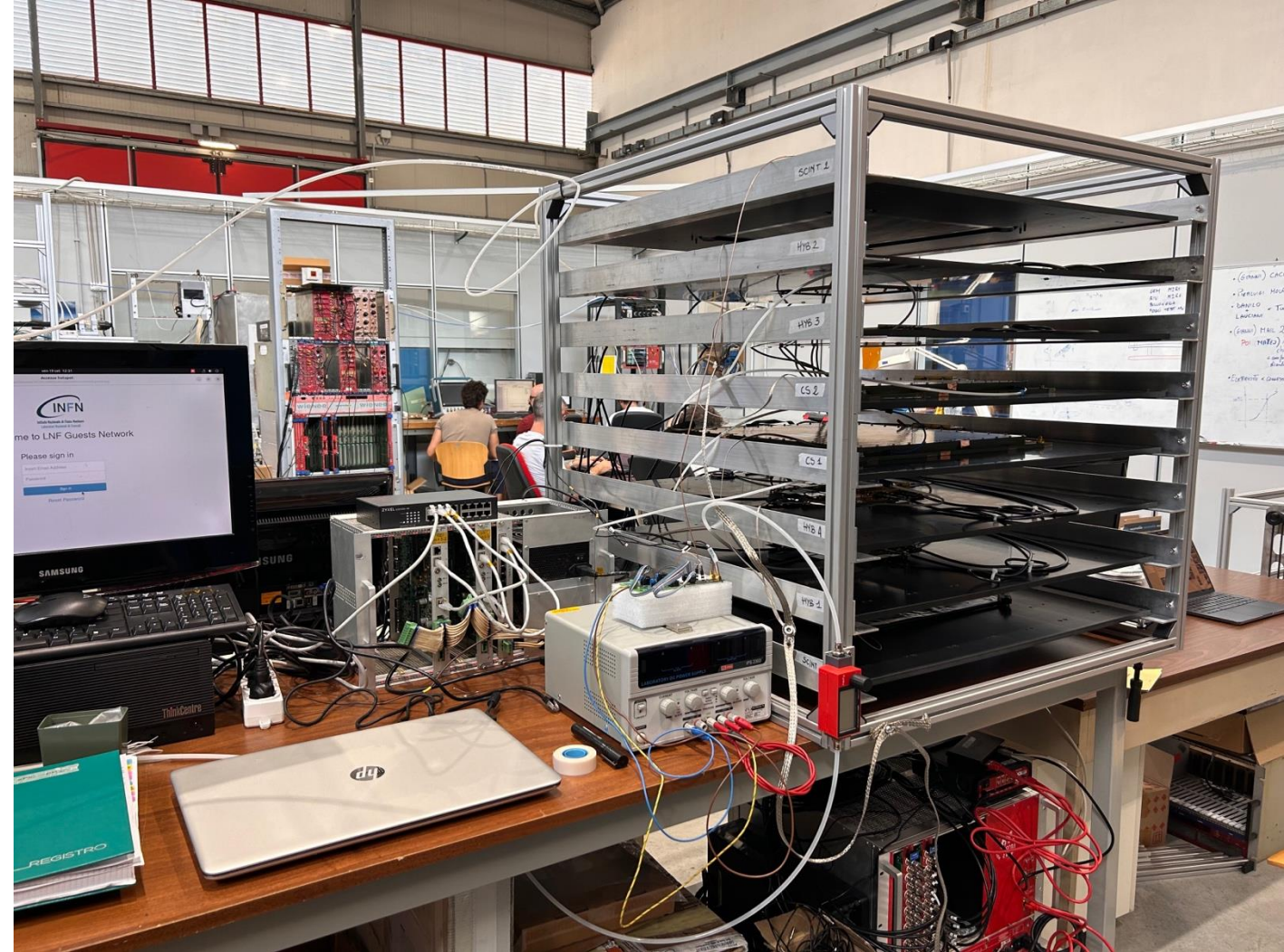
- APV25 + SRS + mmDAQ3 (24 chips connected, 2 FECs)

Gas mixture:

- Ar:CO<sub>2</sub>:CF<sub>4</sub> (45:15:40)

Data analysis framework:

- Corryvreckan

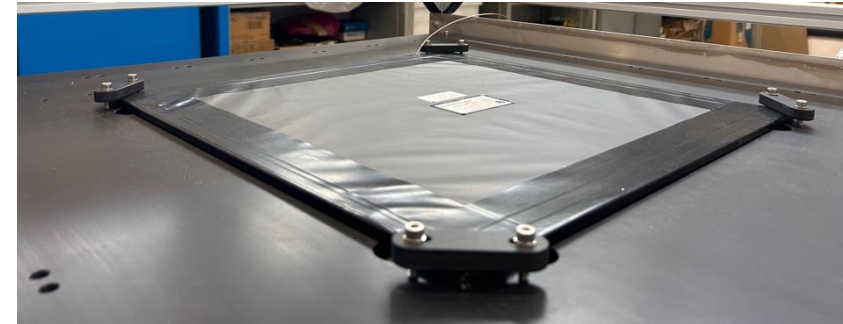
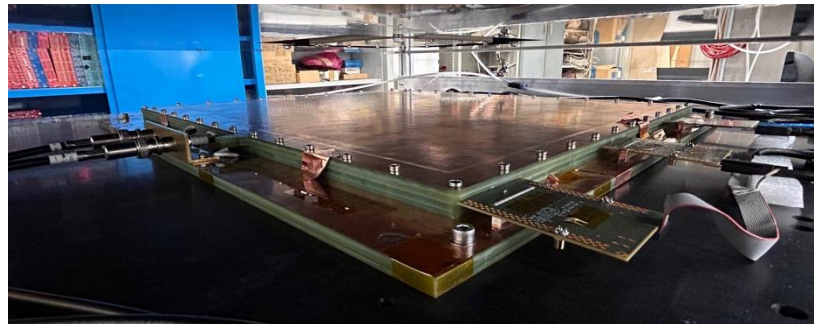
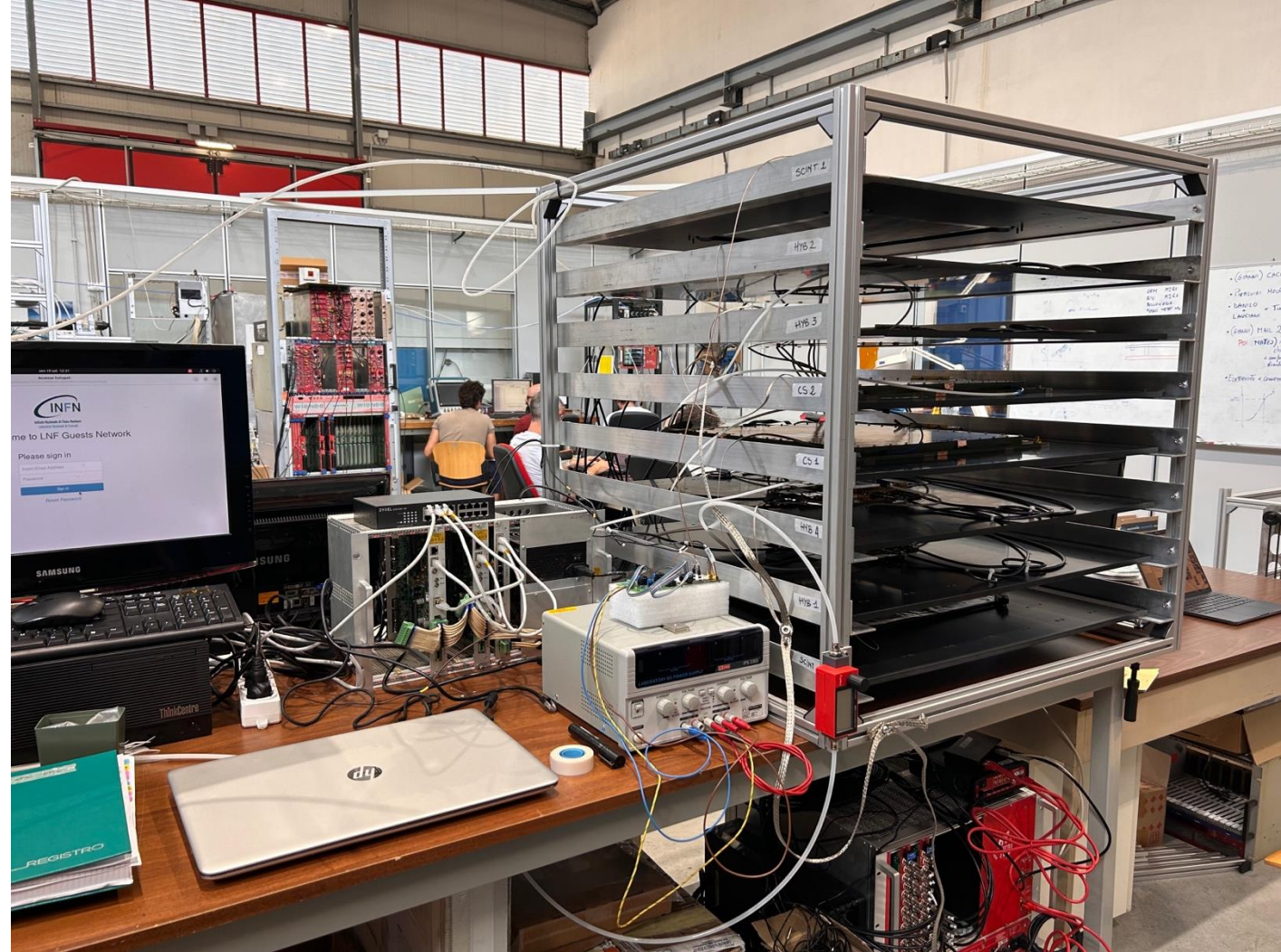




# Operation @LNF INFN

- Safety power on is ongoing
- Data taking is expected to start next week

Results will be used as starting pint for the operation at the next Test Beam





# Towards Test Beam @CERN H4 beam line November 2025

- 2 G-RWELL quadrant detectors in construction, delayed to the end of September
- Hybridisation of the large area CS detectors following GEM glueing
- New mechanical setup with rotating stations (90% parts produced)
- Additional HV channels and acquisition FEE

