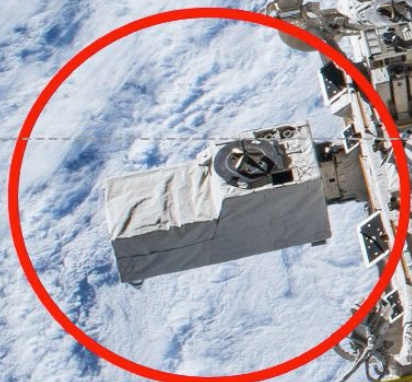


CERN RE25 Review  
February 8, 2024



**CALET**

Calorimetric  
Electron Telescope

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for the CALET Collaboration



## RE25 beam test 2024 apparatus

- Beam Tracker:
  - 12 layers of Silicon Strip Detectors (SSD)
  - 2 layers of Silicon Pixel sensors (matrices with large pixels  $\sim 1 \text{ cm}^2$ )
- Devices under test (DUT):
  - 4 layers (64 r/o channels each) of Low Gain Avalanche Diodes (LGADs)
  - 2 LGAD boards with dedicated electronics for precision TOF measurements
  - 1 LGAD board with dedicated FE ASIC prototype
- Beam scintillators
- RE25 custom rack in the beam area for trigger logic and ancillary electronics

Our requests for equipment in the beam area:

- one extra standard rack
- local access to beam extraction sync signals
- tables for PCs, power supply units, fast digitizers, etc.

# RE25 - SPS ion run 2024 requests

## Beam requests:

- Fragmented beam
- $A/Z = 2$  and  $2.2$
- Deuterium included
- Energy as high as possible (150 GeV/n)
- 1~2k particles/spill

## Infrastructure requirements:

- **1 DESY table with remote control**
- Rack in beam area with access to beam extraction sync signals
- tables in the experimental area for PCs, power supply units, fast digitizers, etc.
- crane for installation and de-installation (weight is less than 100 Kg)

## Beam line:

- **main user** run in week 47 → beam pipe in front of the detector (downstream Goliath table)
- It is important **to have NO material upstream** of our apparatus

Storage area: if our allocated beam time starts on Monday we need to unload our equipment and store it in a **safe and lockable place** (a nearby barrack would be ideal if available)