

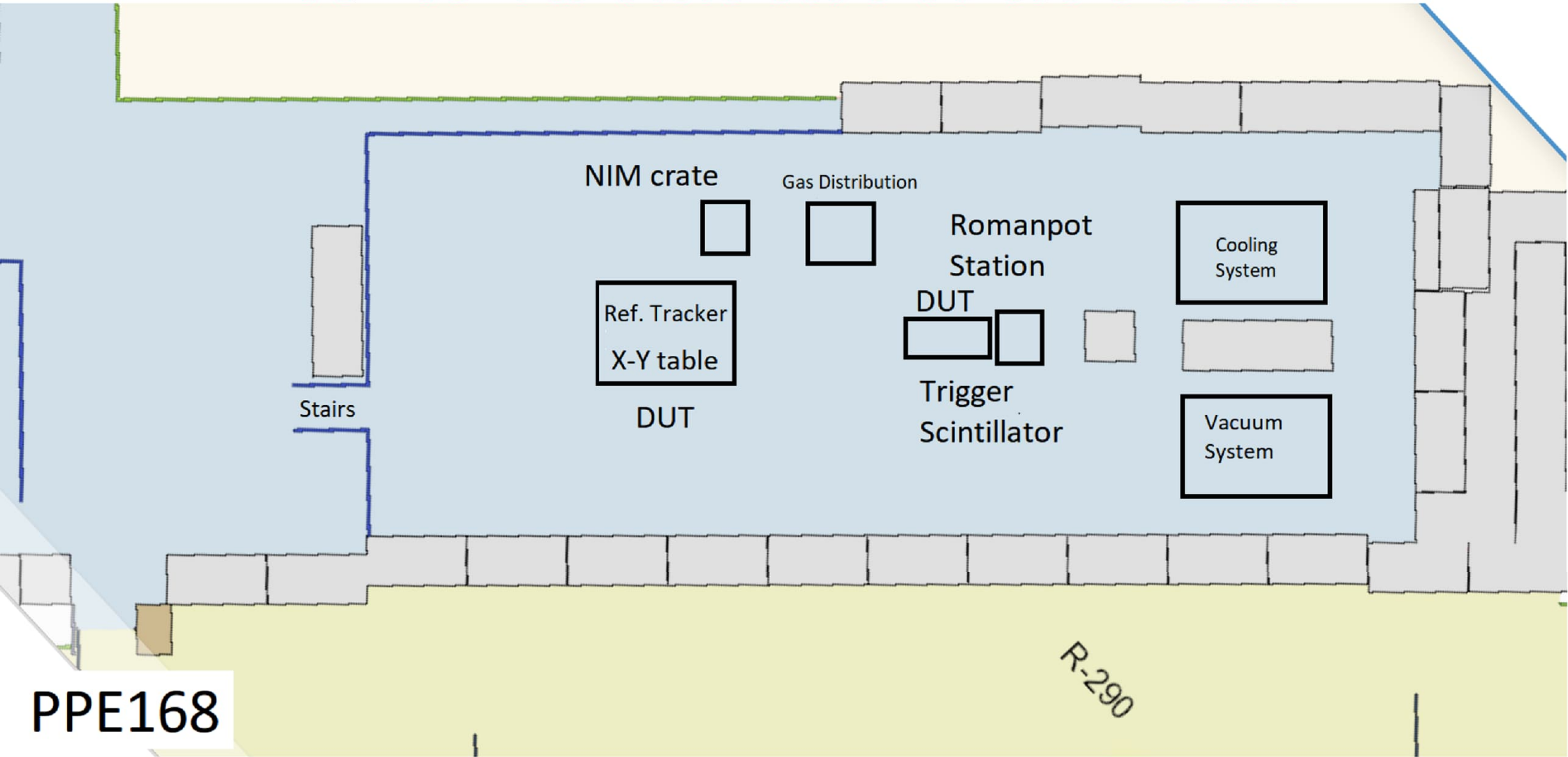


# CMS PPS AUGUST 2024

## (PPE168)

F. García  
HIP

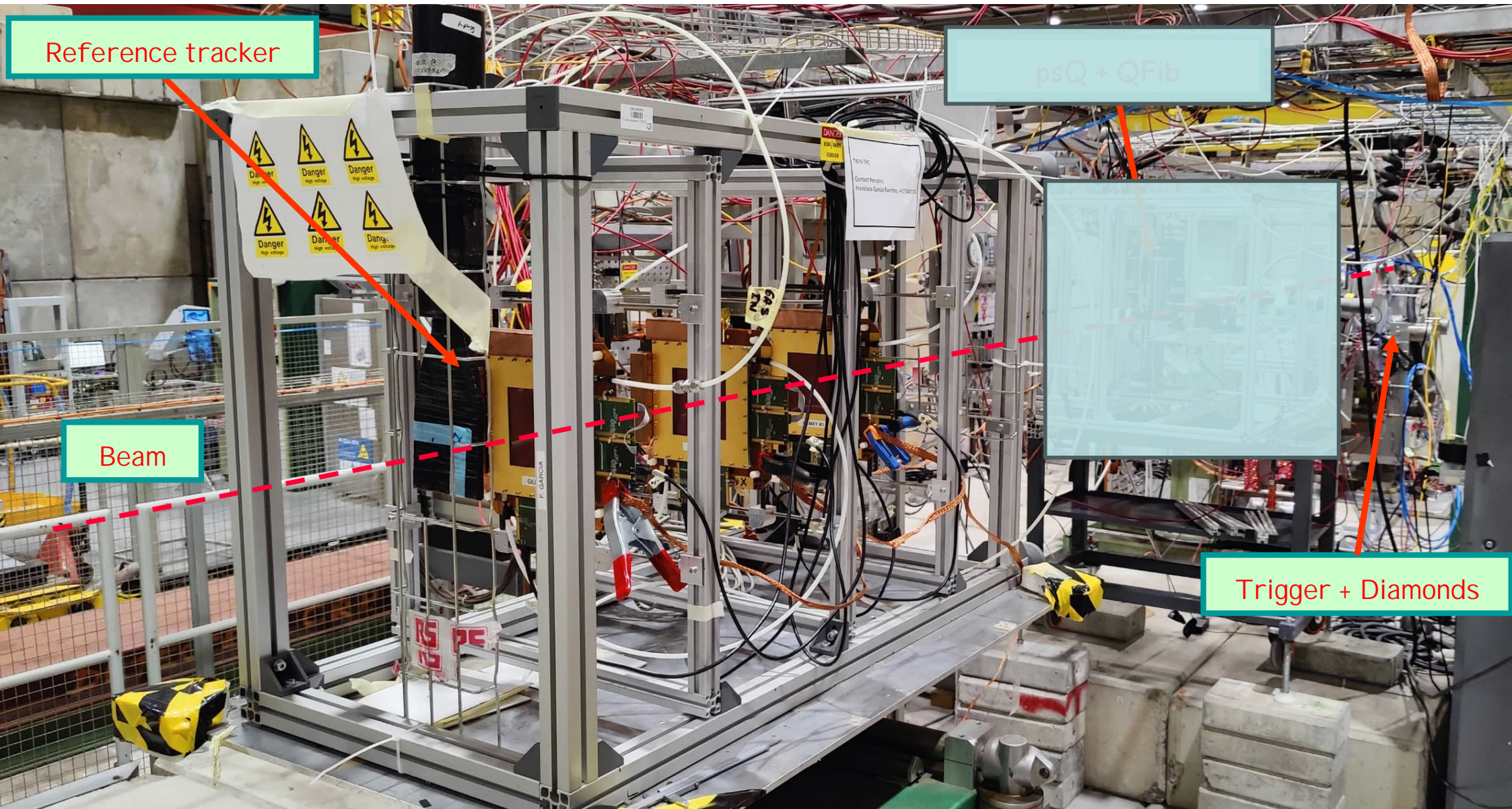
# Test beam area in H8C



PPE168

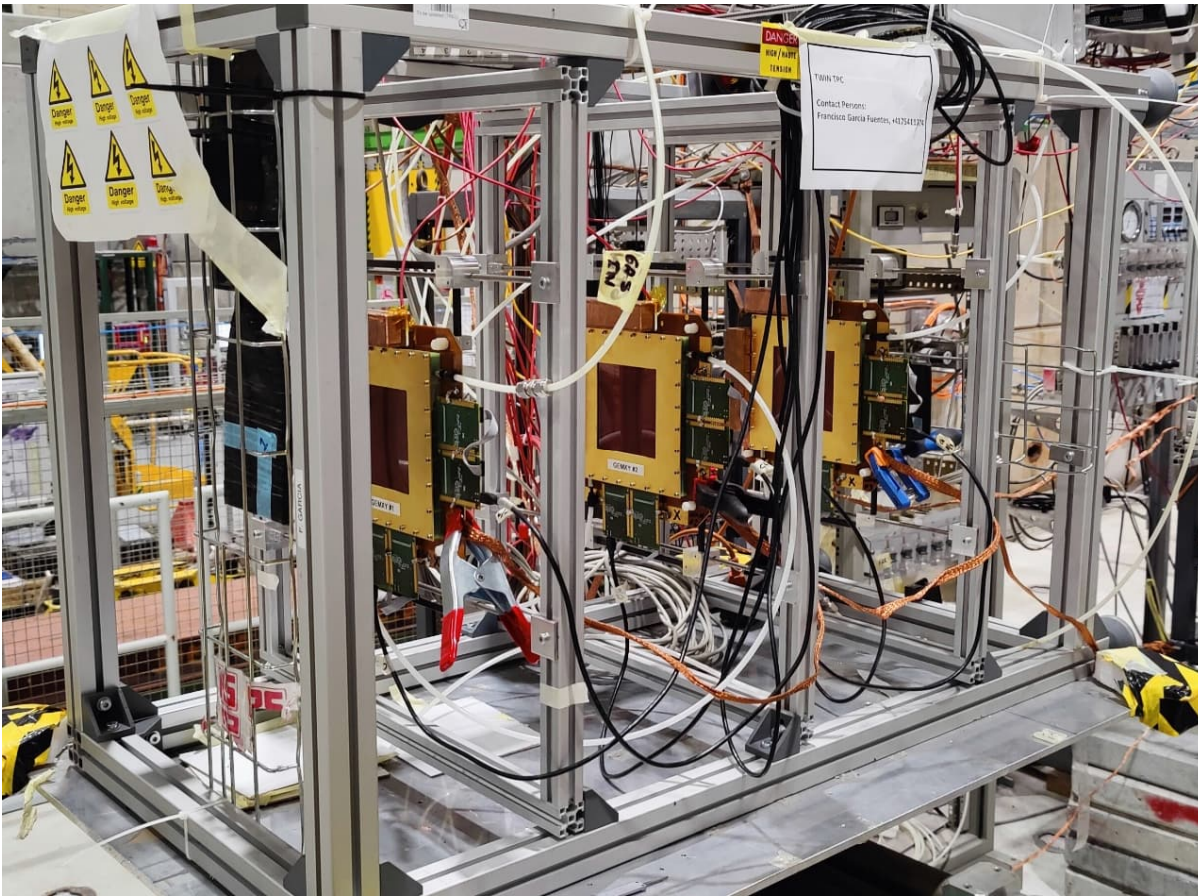


# Test beam Setup





# Reference Tracker - Three planes



Beam Conditions:

Pions+ @ 180 GeV/c

With  $< 2$  sigma in H8A

Beam profile for 1 cm x 1 cm.

DAQ used DATE

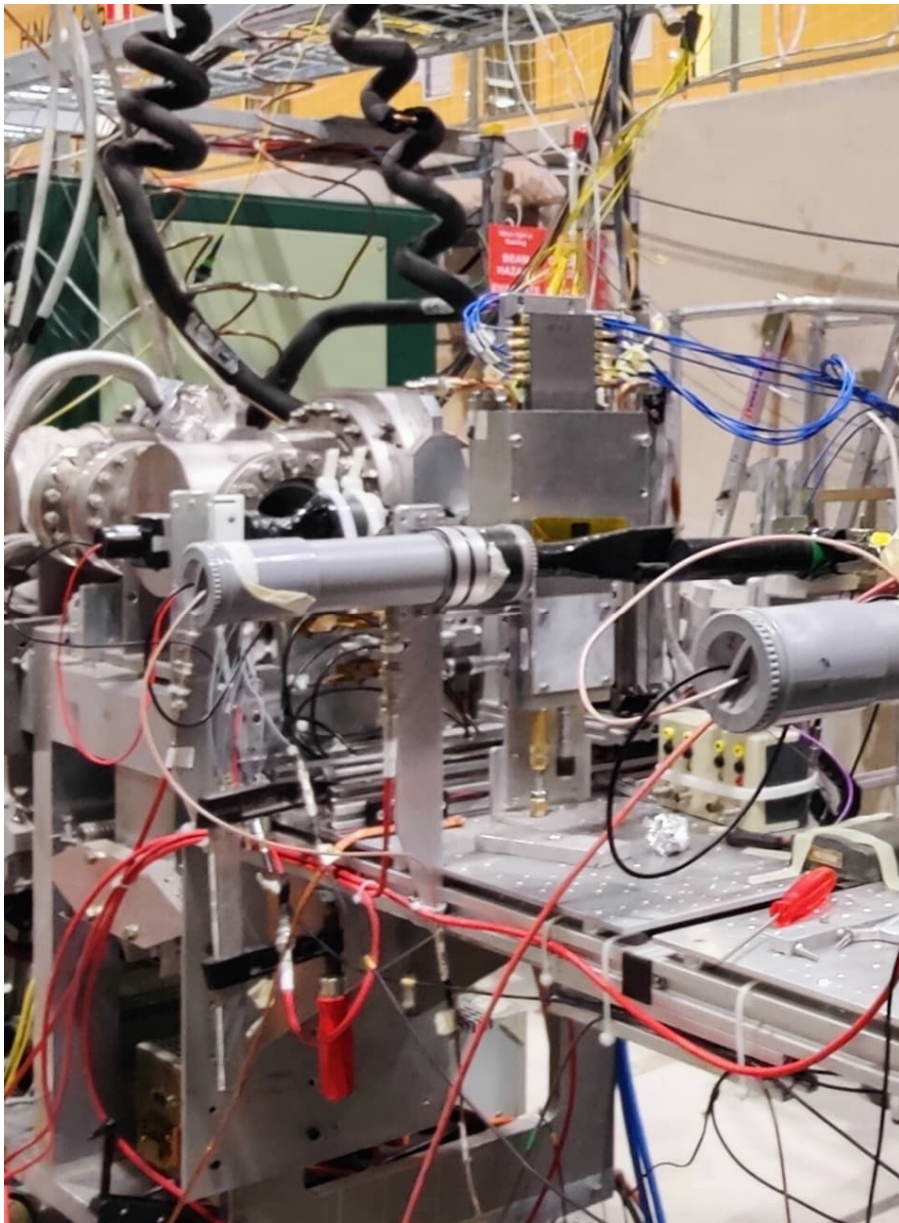
Monitoring in Amore.

Courtesy of RD51 (k. Gnanvo)

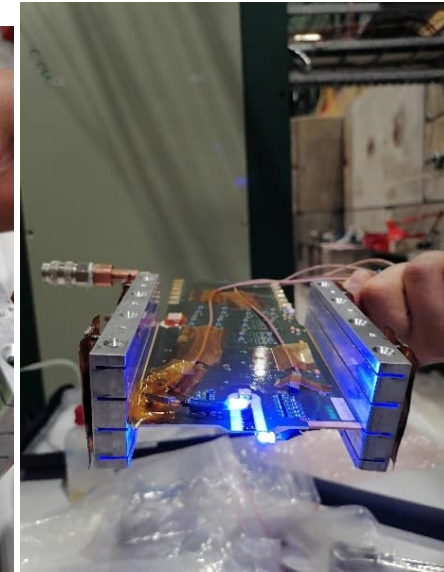
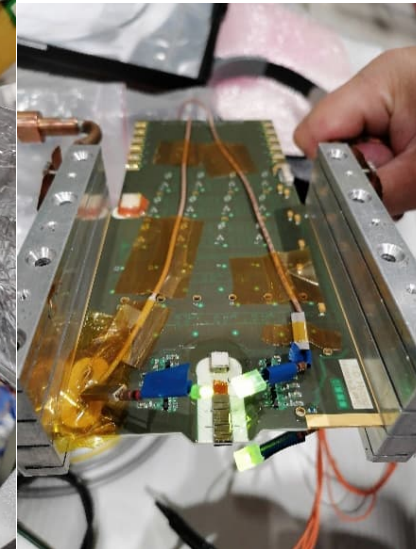


# Diamond detectors

Irradiated Diamonds at the LHC during 2023  
DAQ used SAMPI C

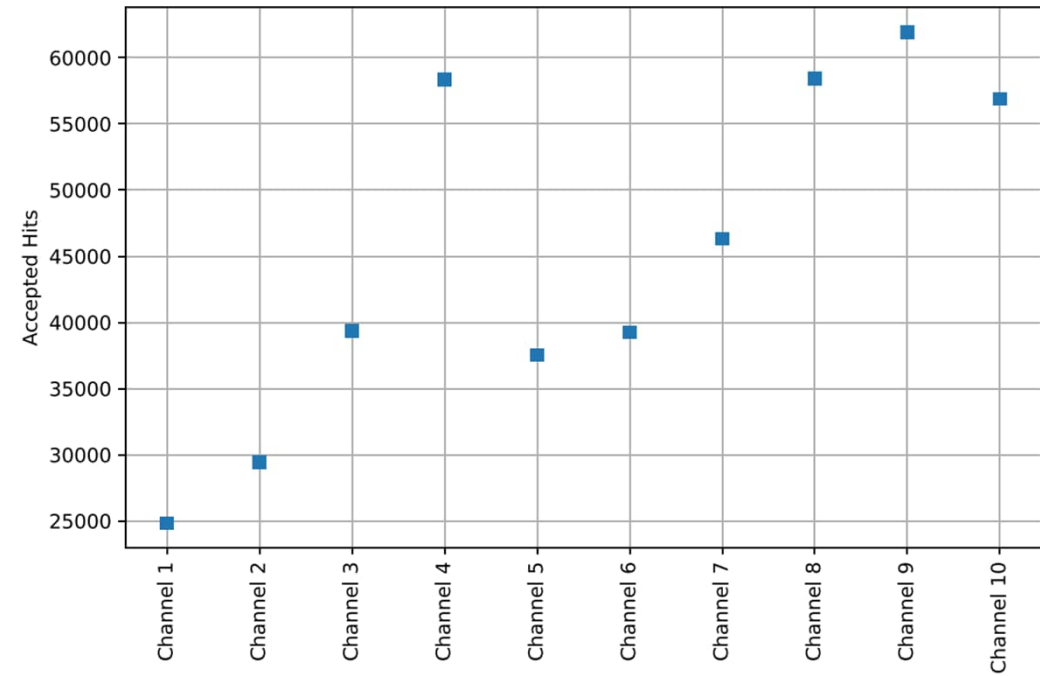
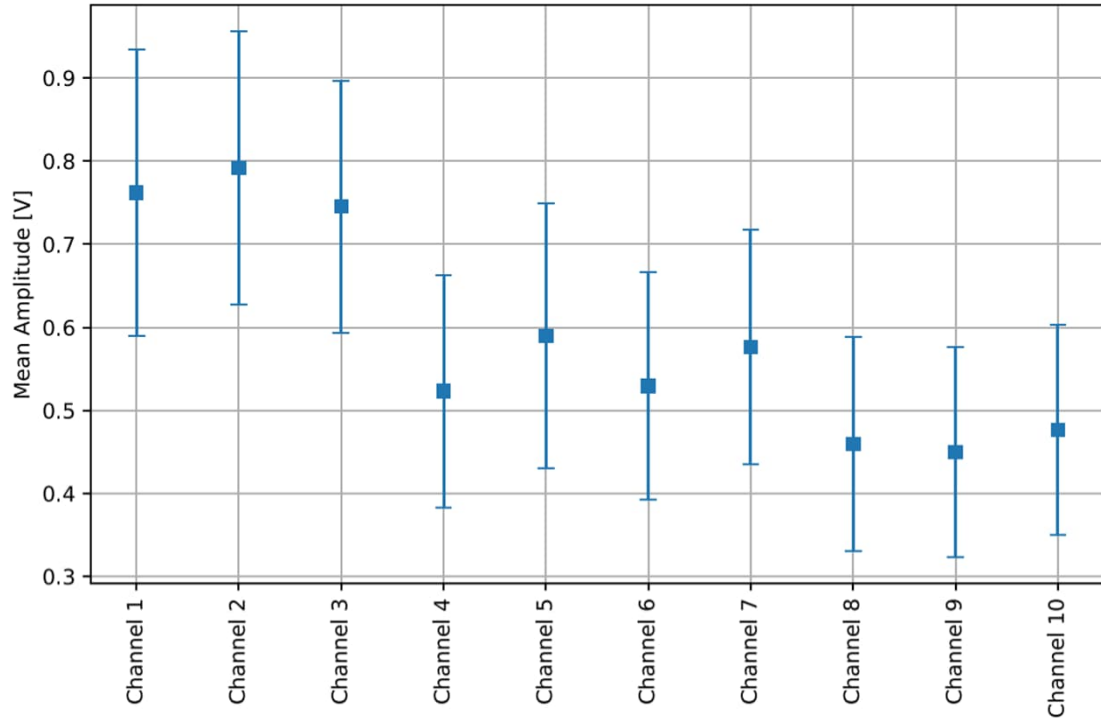
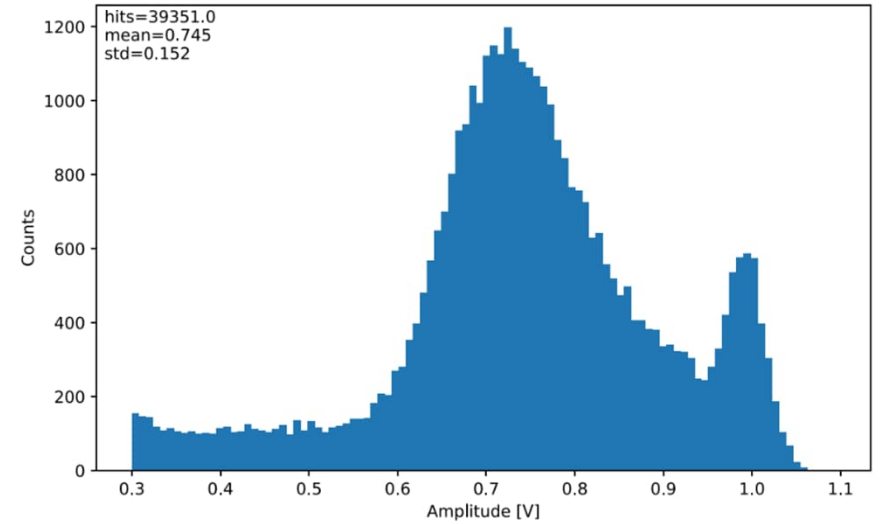


Board #17:  
LEDs: Red, Green and Blue



Board #17:  
LED: Red  
Very first run!

Channel 3



# SUMMARY

- Alignment was already existing, which was done using the reference (a triple GEM detectors) tracker, placed on a XY table.
- The Diamonds detectors took data with different types of LED diodes (On/Off)
- The start of this beam campaign was difficult, but slowly things were adjusted. Thanks to the beam physicist (Maarten).
- The beam spot was widened in both planes once that all the setups upstream were installed, despite of this data was taken.
- The intensity varied starting with 30k/spill then moved to 17k and last day 147k (best).
- All the team thanks to all the crews in the NA --> Every one very proactive when it was needed to intervene even during the weekend 😊