

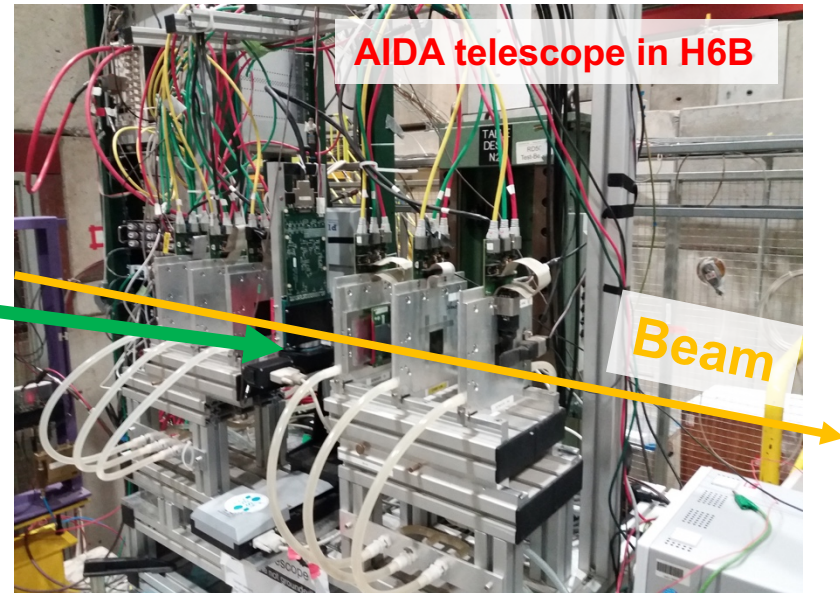
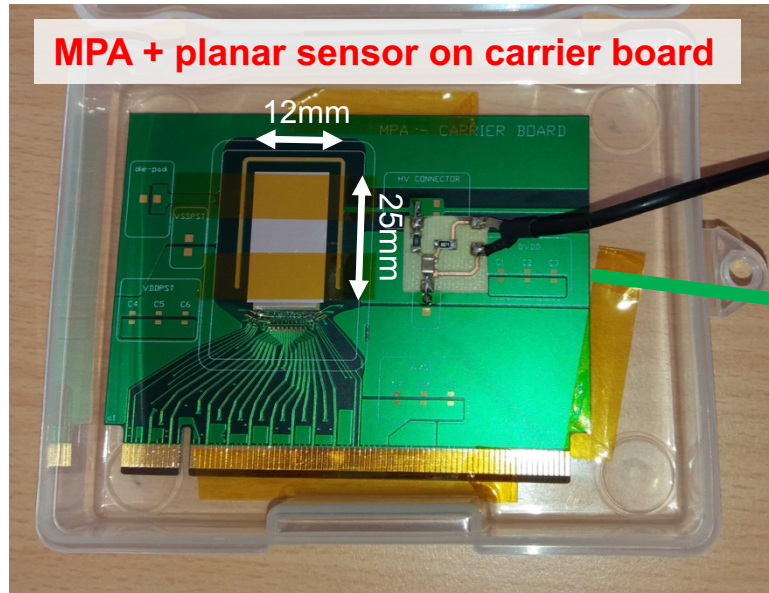
# **CMS Outer Tracker testbeam, April 2018**

**S. Mersi (CERN), A. Nürnberg (KIT) for the CMS OT testbeam team  
PS/SPS Users Meeting, May 3rd, 2018**

INSTITUT FÜR EXPERIMENTELLE TEILCHENPHYSIK (ETP)

# CMS Outer Tracker Testbeam in H6

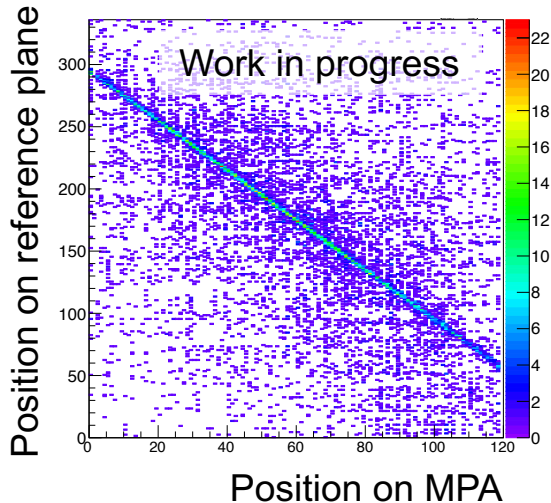
- April 16th to 25th in H6B
- Single “Macro Pixel ASIC” (MPA) for CMS PS track trigger module
  - Bump bonded for the first time to planar sensor (100um x 1467um pixels)
- First time in beam
- Most data taken together with the Mimosa telescope
- Half-day standalone run with higher beam intensity (telescope not capable to digest the rate)



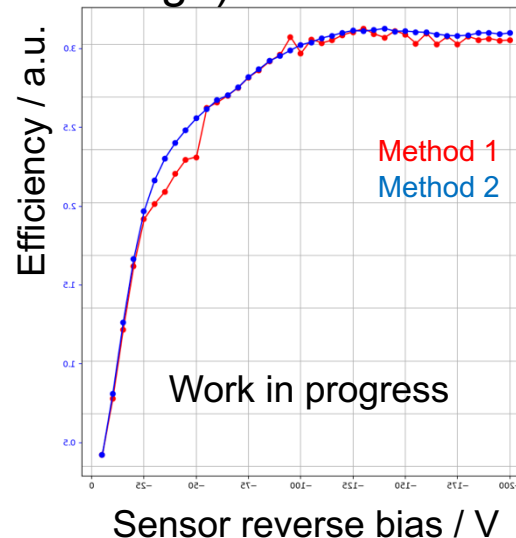
# First online plots

- 2 devices tested in beam, some initial measurements:

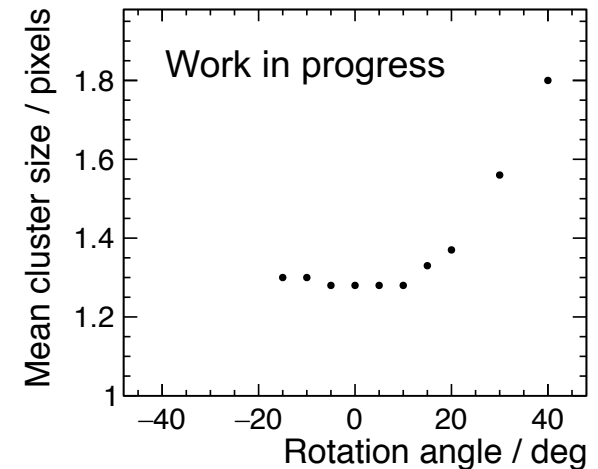
MPA detects particles, correlation to the telescope achieved



Sensor bias scan (here: efficiency vs. voltage)



Rotation scan (here: cluster size vs. angle)



- More detailed analysis to come
- We had a successful beam period! Thanks to Alexander and Bastien for their support and to the SPS operators for the nice and stable beam.