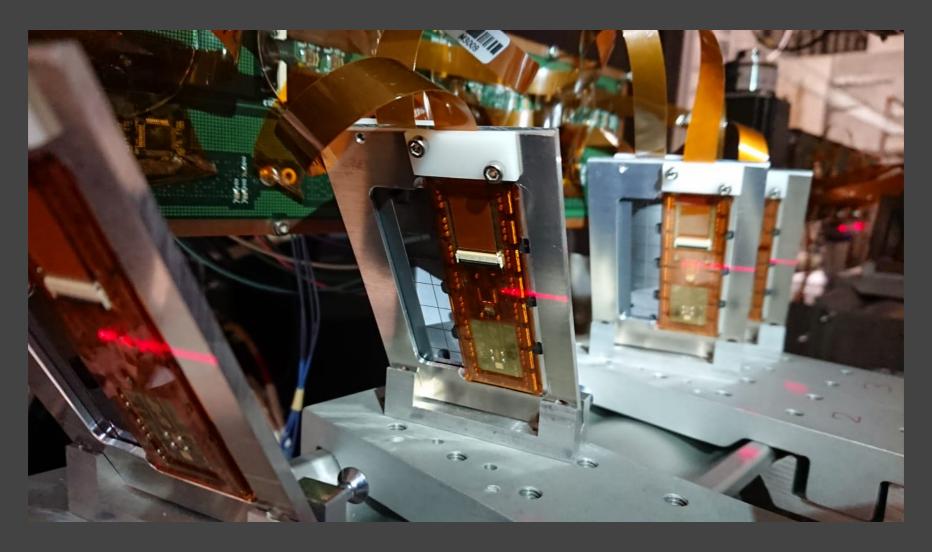
## CHROMIE

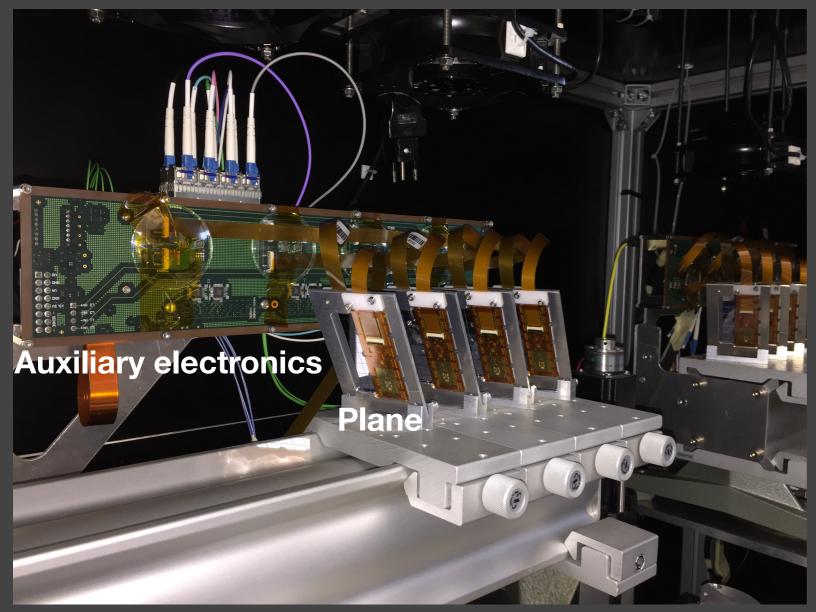
**CMS High Rate telescOpe MachInE** 



#### Nikkie Deelen

on behalf of the CHROMIE Team

### CHROMIE Telescope



**Downstream arm** 

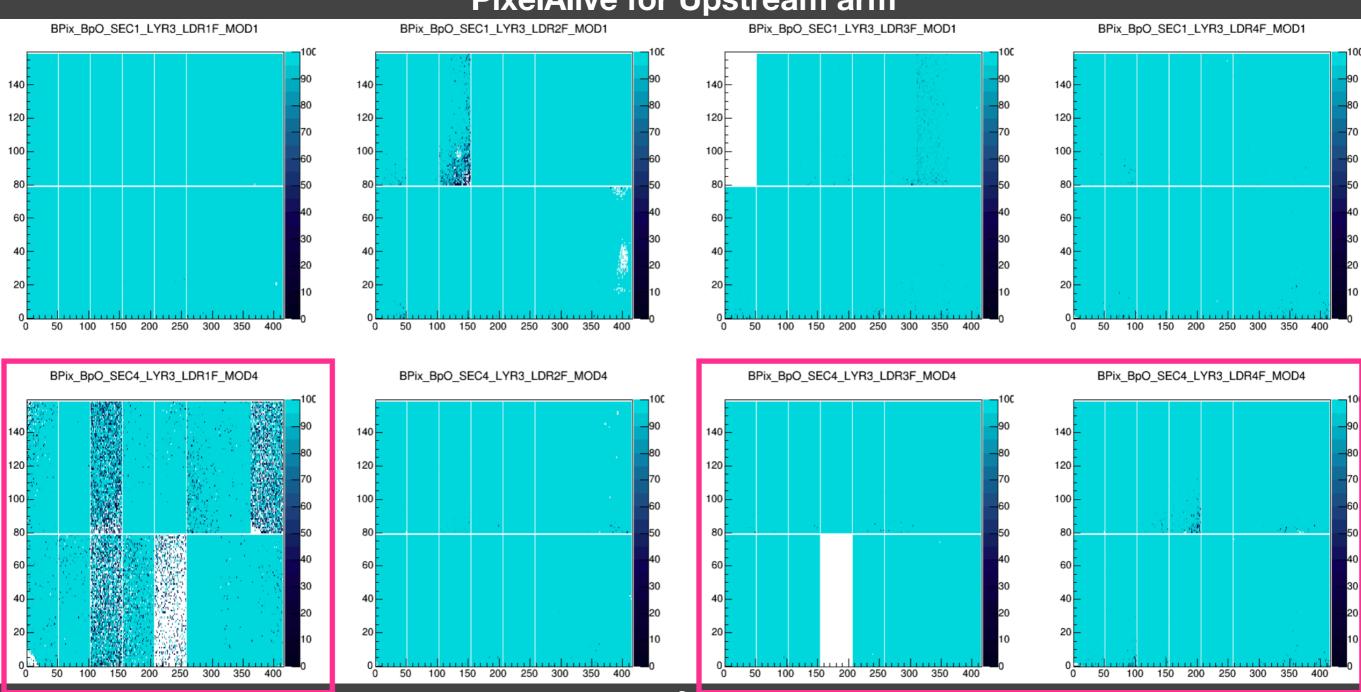
- CMS BPIx modules, Phase-I
- 2 modules per plane
- 8 planes, 4 upstream/ downstream
- Room for multiple DUTs in center

- Can cope with particle rates up to 200 MHz/cm<sup>2</sup>
- Expected resolution: <14 μm</li>

#### Calibrations

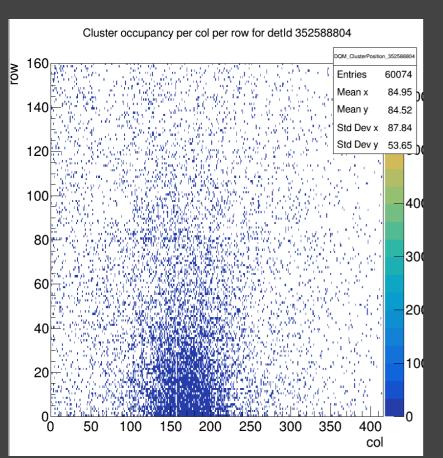
- After installation we've had cooling problems for quit some time
- While fixing those we were able to do calibrations
- Finding calibration pulse delay, using it to calibrate threshold, check with PixelAlive

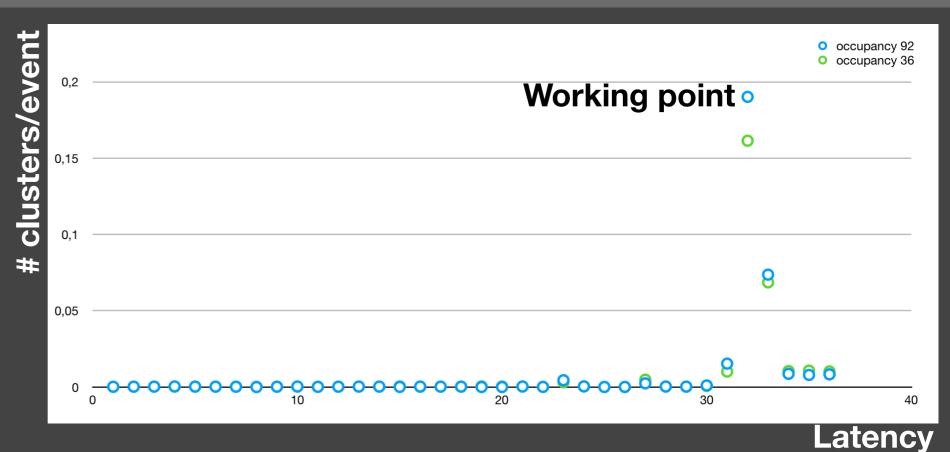
PixelAlive for Upstream arm

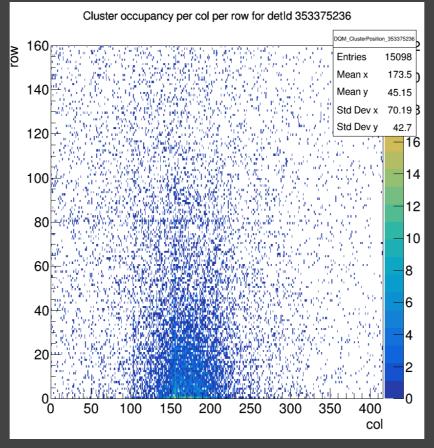


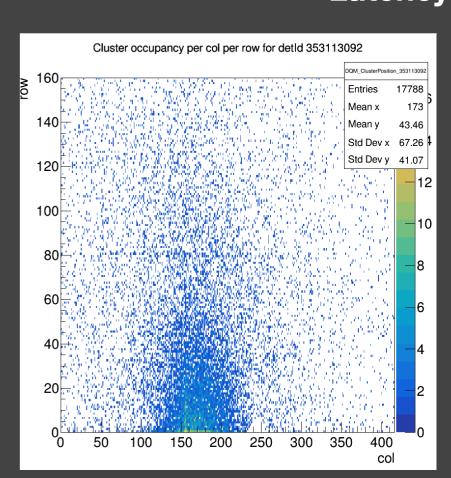
#### Beam

- So now we are doing timing scans with the beam
- And we found a starting point for three modules yesterday
- Next up is using this working point for more modules









#### Thanks!

# Thanks a lot to everyone from the SPS facility, and I think it's time I paid my rent :)

#### **CHROMIE Team**

N. Deelen

J. Andrea - DQM

S. Mersi - trigger and monitoring

T. Giraud - trigger and monitoring

A. Di Mattia - Delay25 calibration

B. Akgun - general support

V. Veszpremi - local reco

T. Kiss and T. Tolyhi - MB Design and support

N. Siegrist - mechanical design

P. Wimberger - Iv monitoring of the MB

H. Postema A. Tsirou- Cooling

A. Homna, F. Manolescu, I. McGill, J. Bonnaud - Wire bonding

Thanks to all the technicians who were very kind to help on short notice! Thanks to D. Gigi and J. Fulcher for the support with the FEROL.