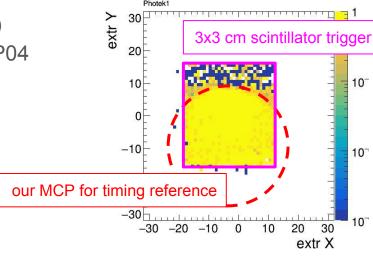# CMS Mip Timing Detector @ H4 PPE164
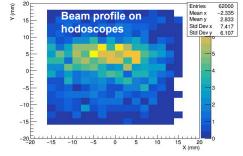
M.Lucchini, A.Benaglia, S.Pigazzini
on behalf of the CMS MTD

20/09/18

Alignment of scintillators and hodoscopes

- Successful alignment of scintillator counters (trigger) and hodoscope planes with the new beamline for NP04
  - thanks to Nikos, Simone and others

rail with scintillators and hodoscopes

Photek1

3x3 cm scintillator trigger

our MCP for timing reference

- We could now run parasitically with NP04 for ~1 more week
  - we are ~1 X_0 thick

Beam profile on hodoscopes

Entries	62000
Mean x	−2.335
Mean y	2.833
Std Dev x	7.417
Std Dev y	6.107

Experimental setup and data taken

- We appreciated beam focused at ~infinite
  - allows a better extrapolation of impact point on our target using the 2 hodoscope planes
- Tested two sensor candidates to build the MTD barrel detector
  - data will provide strong input to write the TDR (due by early 2019)
- Tested 16 channels module prototype

AMP3

A.Benaglia

3 mm

crystal bar in beam

SiPM matrix

crystal tiles

crystal bars