HGTD IHEP meeting

M.K.Ayoub

Status report

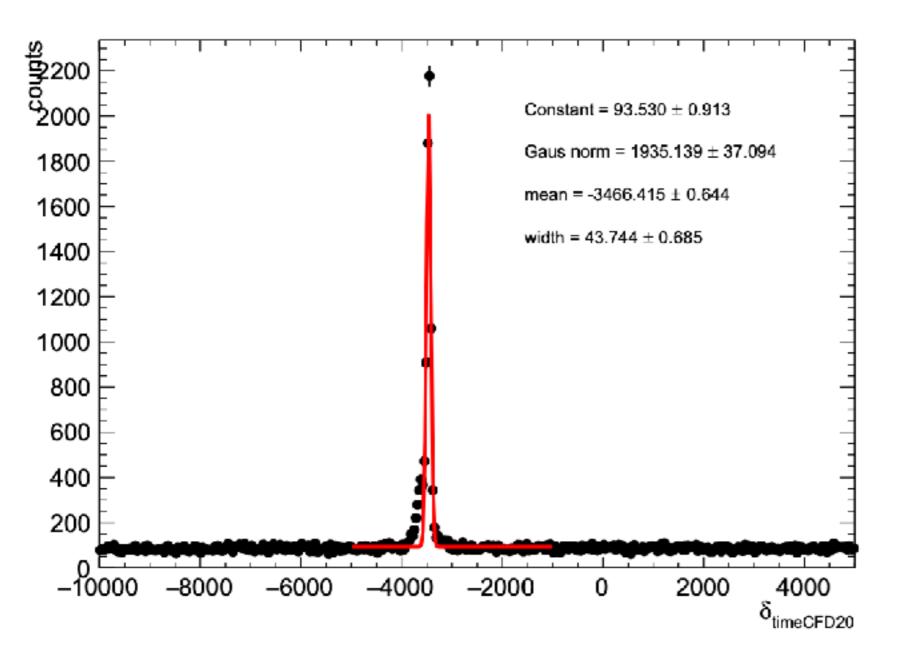
- Completing the study of the reference sensor performance stability (LGA35)
- Calculate the time resolution of this sensor
 - For all 2018 test beam campaigns
 - Study the evolution of the time resolution as function of time

Time resolution

- Extraction of the time resolution
 - Calculate the time difference between the LGAD and the Silicon Photomultiplier SiPM
 - Fit the resulting plot using a Gaussian fit
 - Take the width as the resolution
- Technicalities
 - Use the tuples stored on os here: /eos/atlas/atlascerngroupdisk/ det-hgtd/testbeam/HGTDPyAna/v00-15-01/

April test beam

DeltaT between the LGAD and the SiPM



- Just got the result for a single run from April test beam
- Still need to add a cut to remove the background events
- Will add more statistics and do it for the other campaigns to perform a comparison