



WP1 : g-2 Detectors

Milestone-1 : Tracker DAQ Integration : 01/06/2017 : **COMPLETED 10/04/2017**

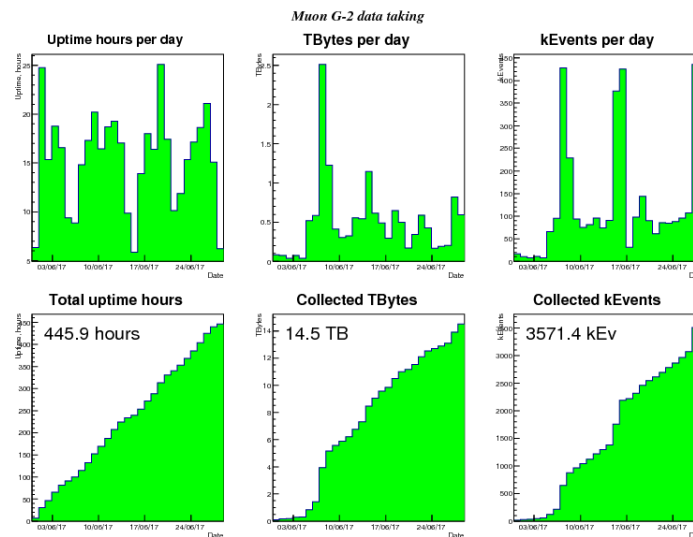
Deliverable 1.2: Report on installation and initial commissioning of g-2 trackers : 01/01/2018



Tracker DAQ software/hardware is complete.
Instrumented tracker DAQ rack & servers in MC-1

Integration with calo + clock/control completed in March.

DAQ has been running with beam with no problems since May-31.

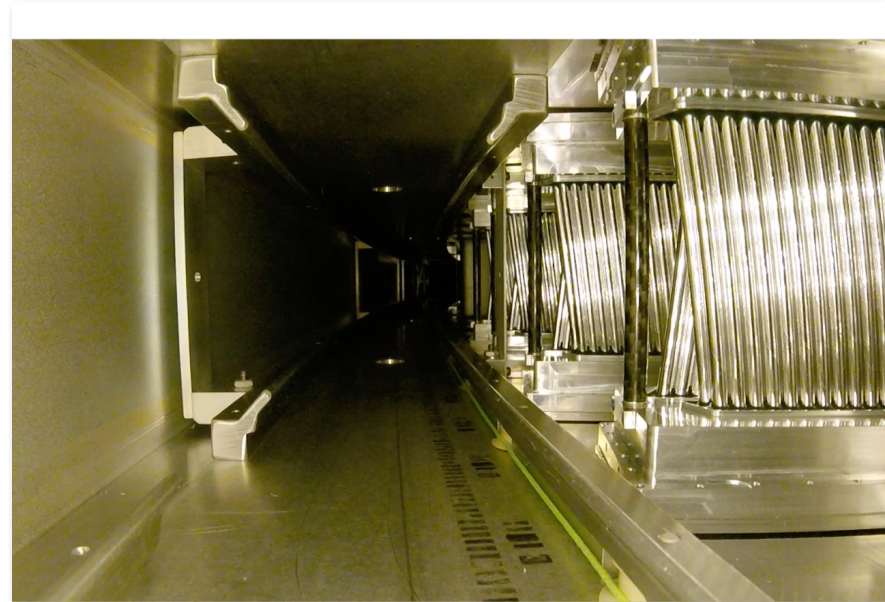
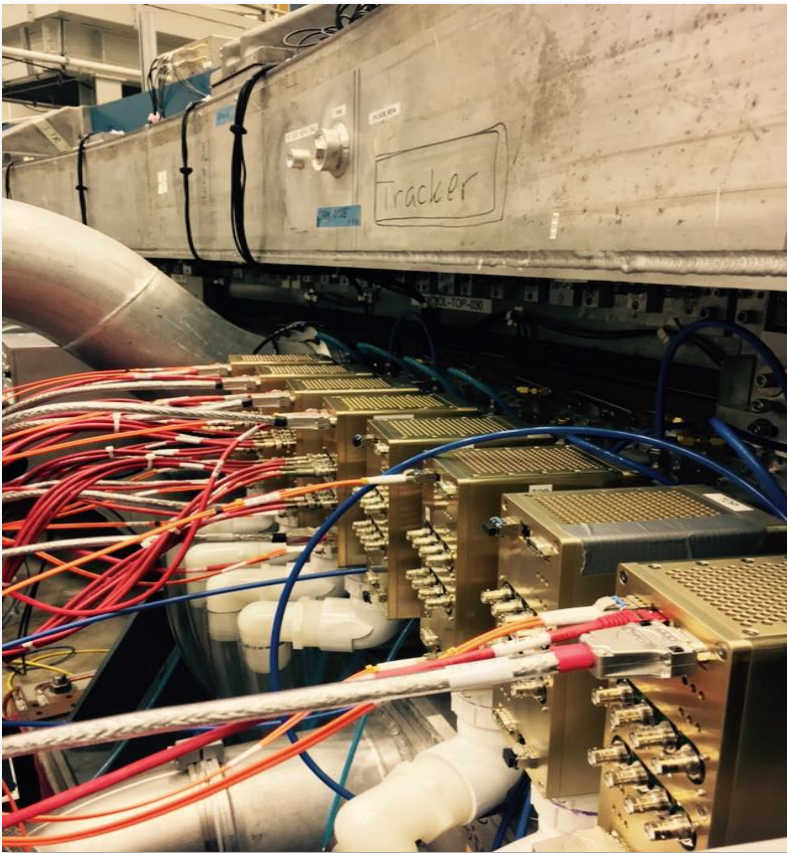


3.5M events recorded so far during commissioning run which finishes on July-7



WP1 : g-2 Detectors

Have one complete station (8 trackers) in ring taking data during the commissioning run.

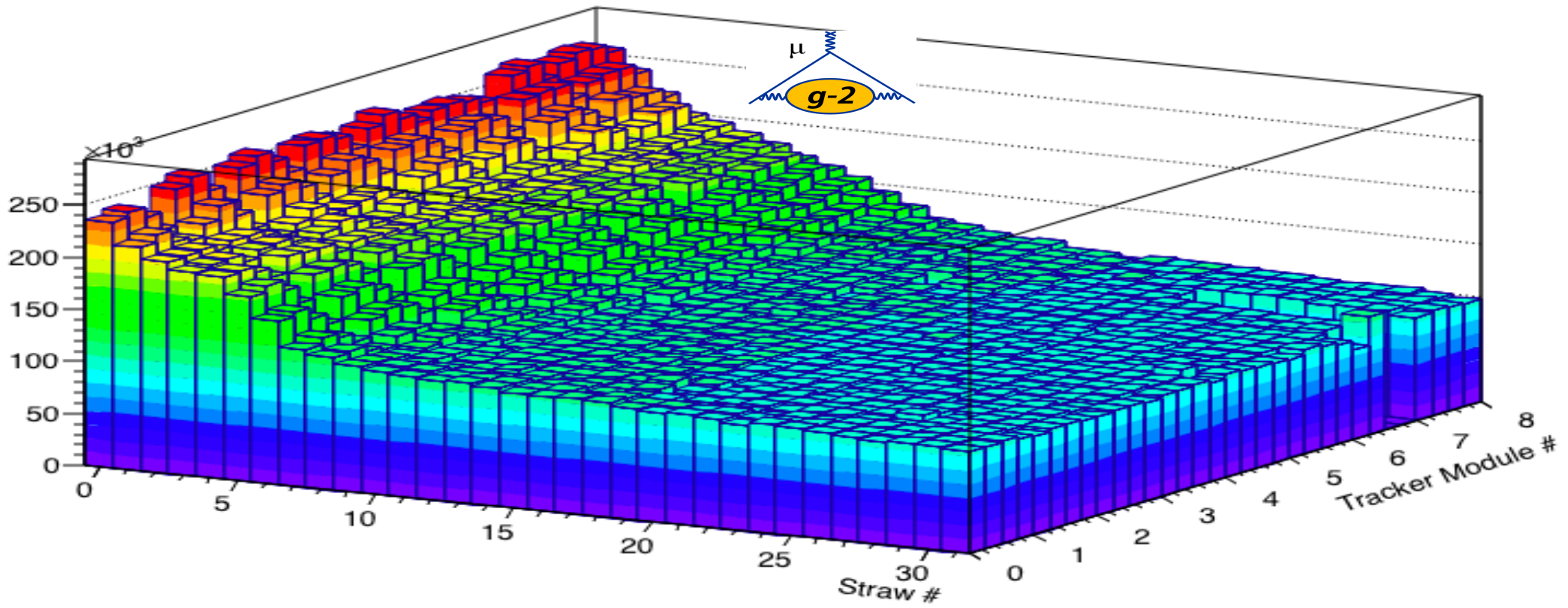


WP1 : g-2 Detectors

Hits recorded in tracker during beam commissioning

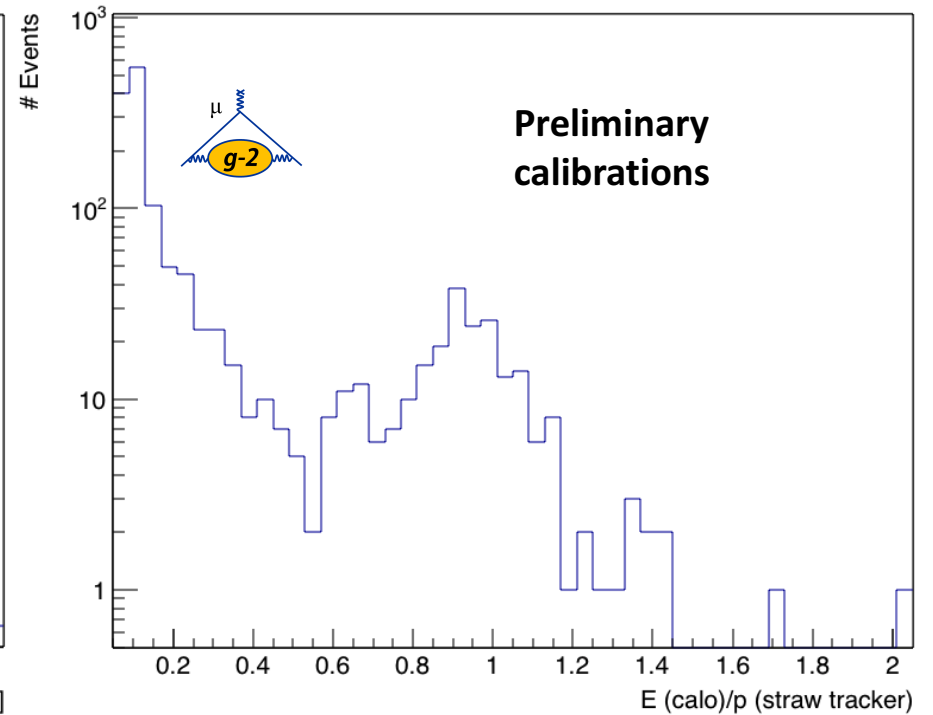
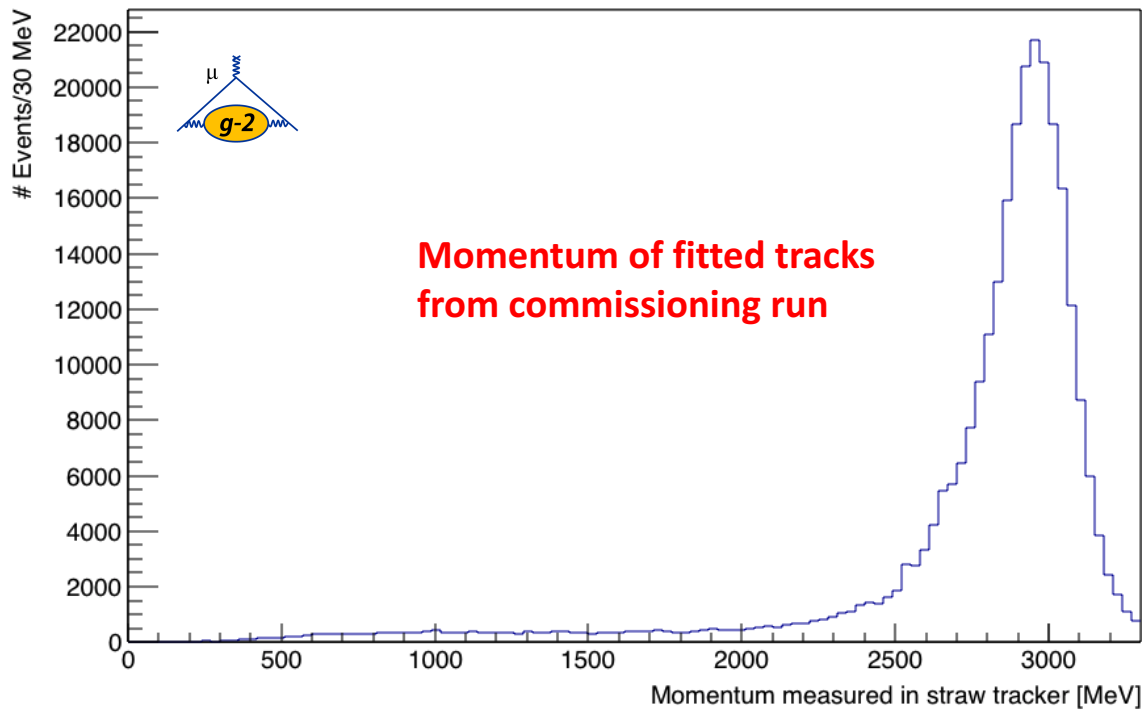
Storage Region

Calorimeter



WP1 : g-2 Detectors

High quality data recorded in both tracker and calos : data matched in time.



A first (g-2) “wobble plot” with 700k positrons (precision between the CERN II and CERN III experiments) from 2 weeks of the commissioning data has already been produced.



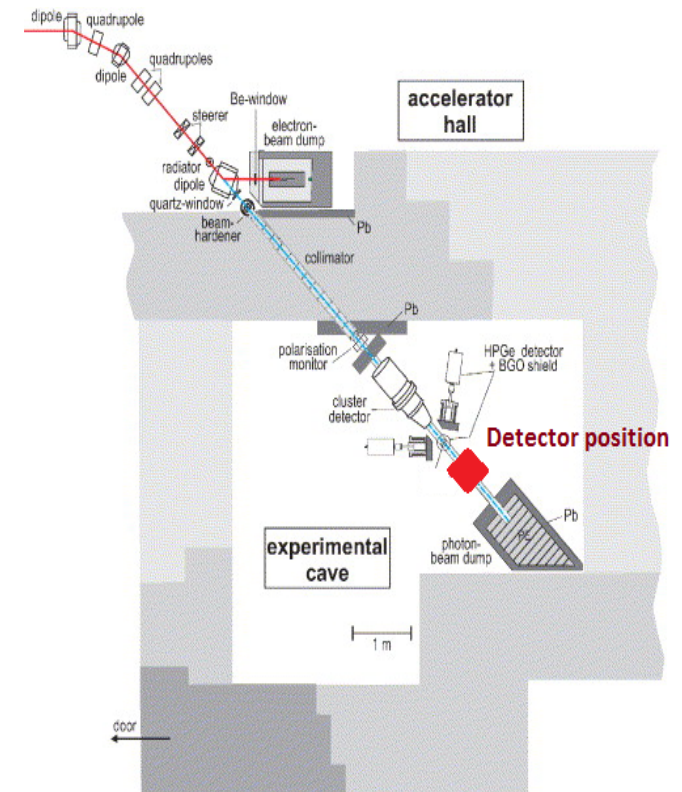
WP2 : Mu2e Detectors

Milestone-3 : Installation of MU2e HPGe detector : 01/01/2020

Deliverable 2.3: Design of Mu2e HPGe detector : 01/04/2018

UK Funding for STM approved by STFC in April. Funding expected to arrive in next month so that STM procurement can begin.

A beamtest of a prototype STM at Elbe/HZDR : 25 -180 kHz photons from 13.5 and 9 MeV electrons will take place Aug 4-6.





WP3 : Calibration Tools (g-2)

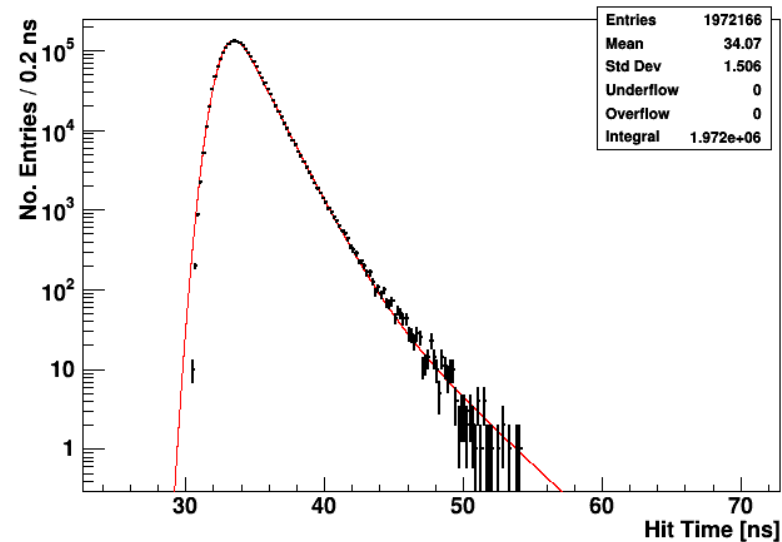
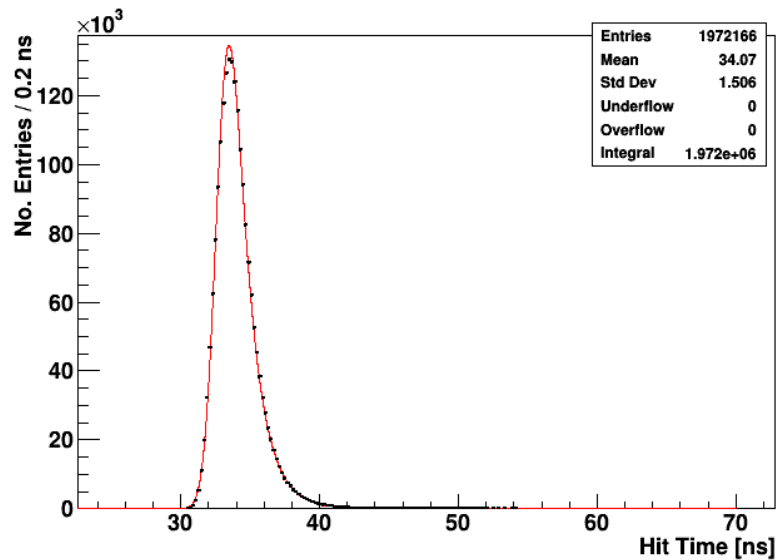
Writing report for Deliverable 3.2 now
- should be ready for the deadline

Deliverable 3.2: Calibration system for g-2 straw tracker (01/07/2017)

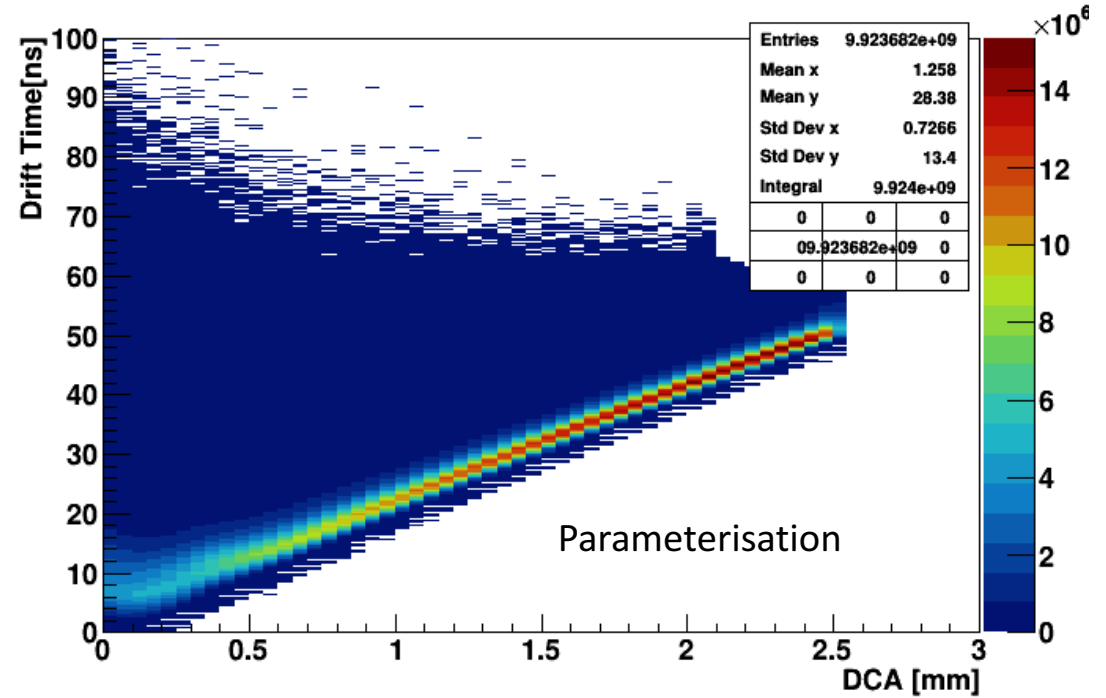
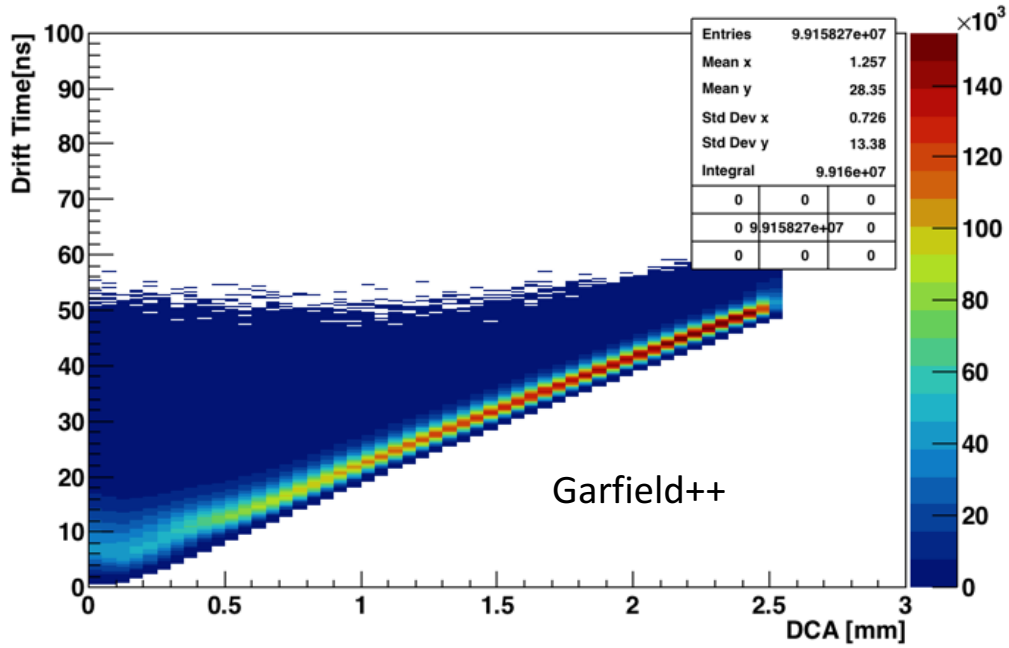
Milestone 5: g-2 calibration system commissioned (01/01/2019)

System exists: vacuum test-stand, cosmic test-stand and source test-stand are used to calibrate each module as it arrives at FNAL.

Cosmic/source data have been used to tune Garfield++ model and this model has then been parameterised (as a function of DCA) to define the time-to-distance (r-t) calibration.



WP3 : Calibration Tools (g-2)





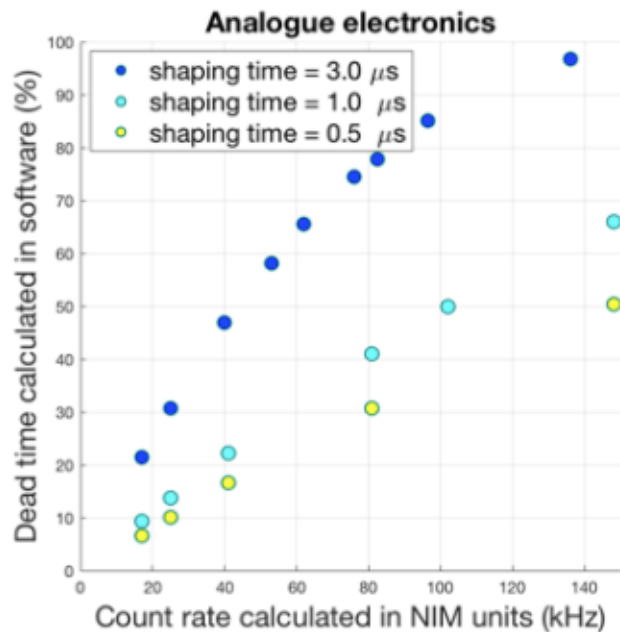
WP4 : Software Tools (g-2)

Milestone-6 : g-2 offline reconstruction code ready for analysis of data : 01/01/2017

Deliverable 4.2: Simulation of 10^{11} muons for g-2 and stress-testing of framework

BOTH OF THESE ARE NOW COMPLETE AND REPORT WAS SUBMITTED IN DECEMBER

Milestone-7 : Mu2e HPGe reconstruction code : 01/05/2019



Begun to implement different pulse fitting algorithms and examining rate/deadtime implications with both analog and digital readout/processing.

Main input to this will be the beamtest at ELBE/HZDR