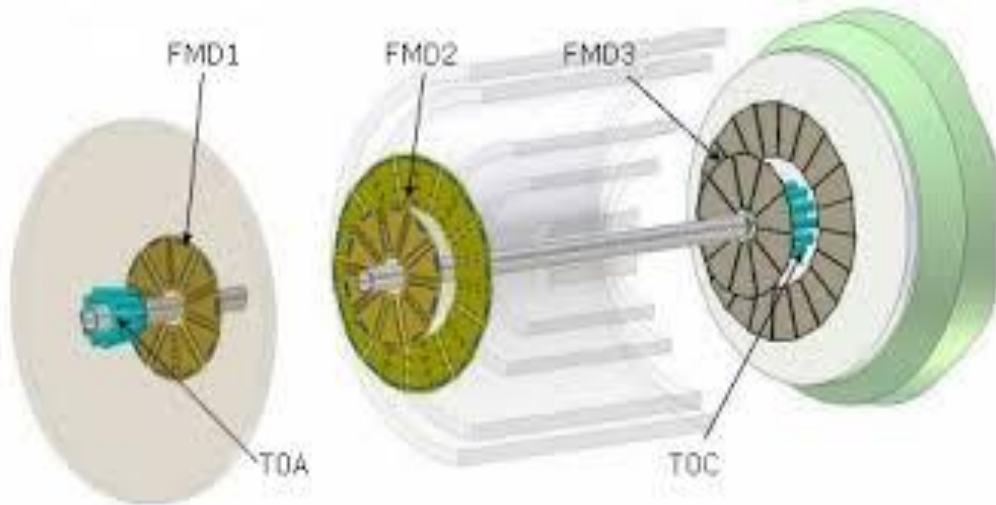# T0 calibration

Alla for T0 team

ALICE offline week
24 November 2015

T0 detector

Provides interaction time signals for TOF:
as 1st particles from each side (T0A+T0C)/2 – do not depend on vertex
T0A , T0C corrected with primary vertex

T0 calibration

Slewing correction
- for pp – not needed;
- for PbPb based on 1st fill of physics data

Mean position of CFD time (with slewing correction if PbPb);
Global offset for interaction time signals – T0A, T0C, (T0A+T0C)/2

In high interaction rate environment important to choose only signals from the triggered BC. Mean position of CFD, start amplitude signals, pedestals, OrA, OrC and 0TVX signals are written in OCDB after online calibration.
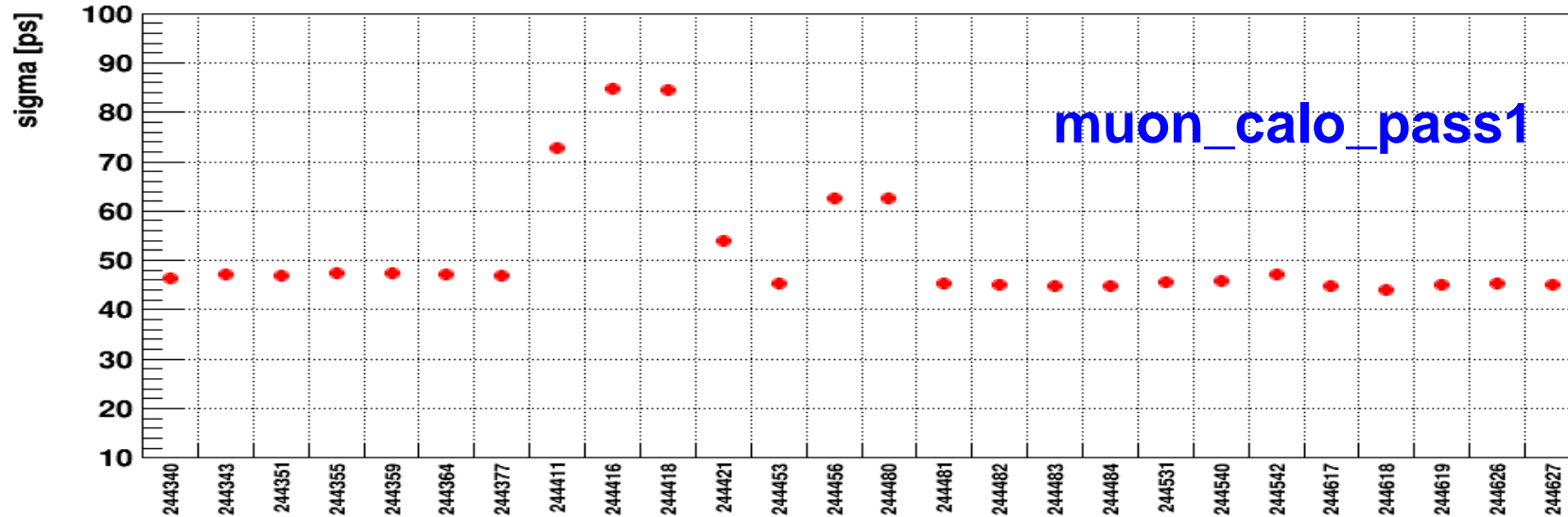During reconstruction only time in range +-1.5ns around mean with start amplitude in range +-20ns will be chosen for competitions.

CPass0 writes **Mean position of CFD time** collected with kCalibBarrel trigger;
CPass1 writes **Global offset for interaction time signals**

LHC15n pp: T0 resolution trends

T0 resolution (ORA -ORC)/2

muon_calo_pass1

T0 resolution (ORA -ORC)/2

cpass1_pass1

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