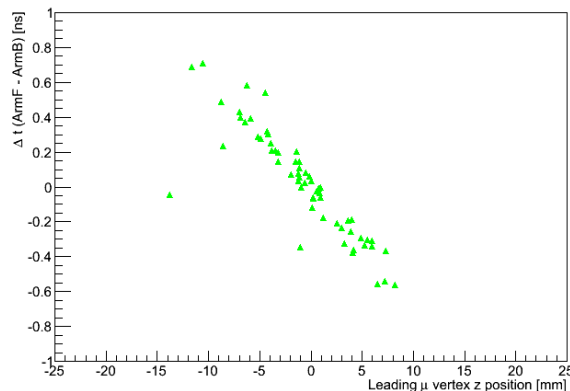
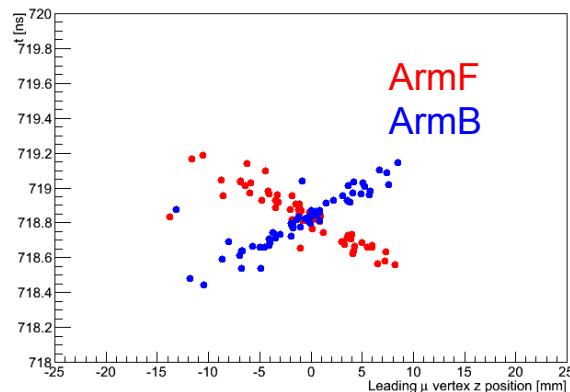


# Input samples

- Testing with updated **8000** events (4x statistics of previous plots) of FPMC WW- $\rightarrow$  ee/mumu/emu/mue produced by Luiz and Maria Elena
  - 25ns,  $\mu \sim 50$
  - Including proton acceptance cuts in the generator
    - Visible x-section \* BF = 3.2 fb for four lepton flavors (ee/mumu/emu/mue)
  - Now with modified crossing angle treatment
  - Only mu+mu- channel used so far

# ToF plots

- After all cuts on central detector, + requiring hits in both arms in all tracking and timing stations (PPS fastsim RECO, smeared with 10ps resolution currently)
  - Absolute ToF vs. leading muon vertex z
  - Time difference between 2 arms vs. leading muon vertex z



# Detector geometries

- PPS geometry implemented as:
  - Tracking station 1:  $x = [-3.15, -23.15]$ ,  $y = [-9.0, 9.0]$
  - Tracking station 2:  $x = [-2.03, -22.03]$ ,  $y = [-9.0, 9.0]$
  - Timing station:  $x = [-2.1, -17.1]$ ,  $y = [-7.0, 7.0]$
- For studies here - require hits in both tracking stations + timing, in both forward+backward arms to be accepted
  - at RECO-level (smeared fastsim)