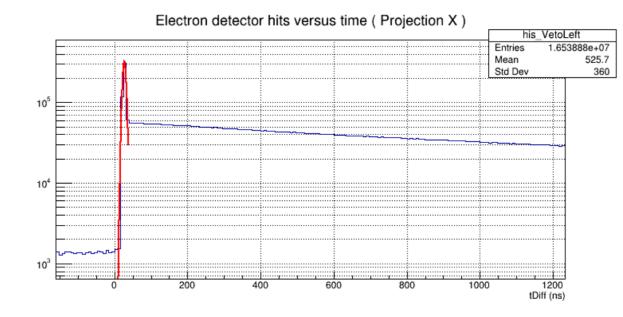


## Update muX meeting 11/11

Michael Heines

#### Time offsets for electron veto

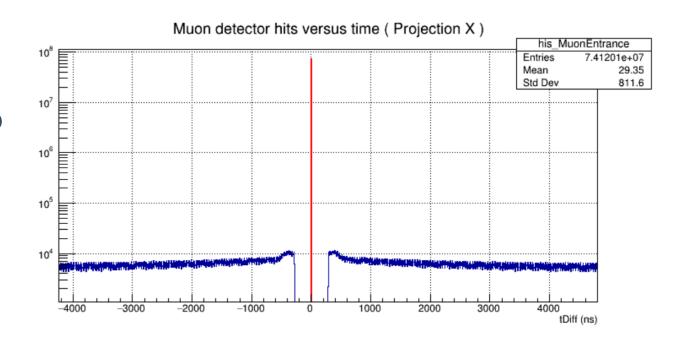
- Electron vetos
  - Fit works well
  - Essentially same values as online (+/- 3ns)
  - Exponential with half life ~1.4µs (is this the reduced muon lifetime?)





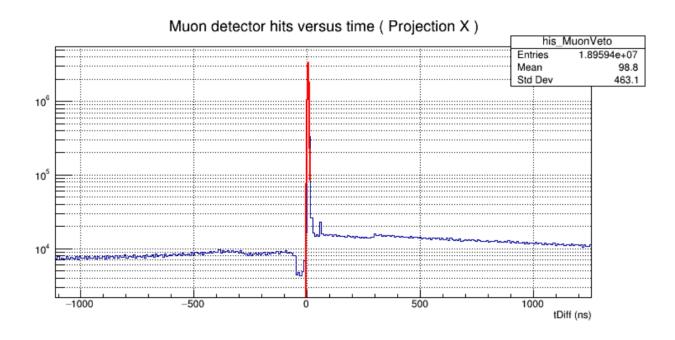
#### Time offsets for muon entrance

- Electron vetos
  - Fit works well
  - Sharp peak at 0 (definition of 0)
  - Discontinuity at +-300 ns (pile-up protection?)
  - Exponential decay (Michel electron?)
  - Rising part (trigger on Michel electron?)



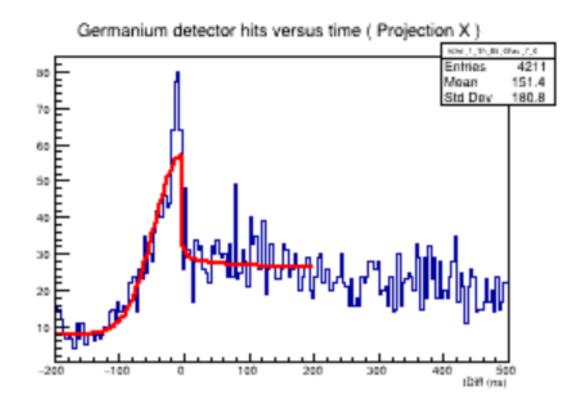
#### Time offsets for muon veto

- Electron vetos
  - Fit works well
  - Essentially same values as online (+/- 3ns)
  - Sharp peak at 0 (double transmission?)
  - Discontinuity at +-300 ns (pile-up protection?)
  - Exponential decay (Michel electrons?)
  - Rising part (trigger on Michel electron?)
  - Dip before and peak after 0?



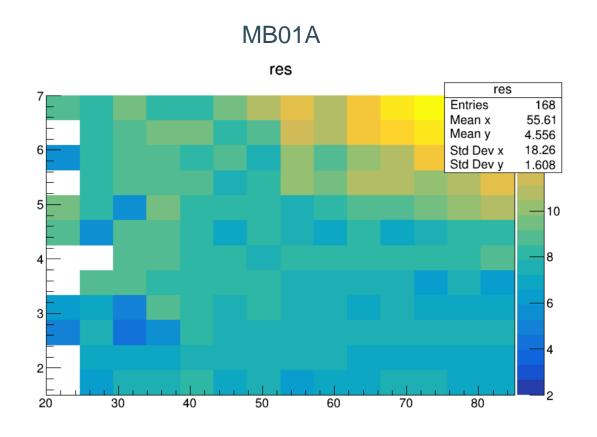
### **ELET** parameters

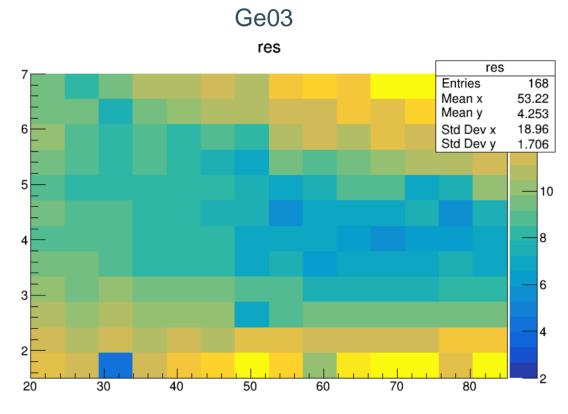
- Scan parameter space
  - Threshold: 20 85 (increments of 5)
  - Factor: 1.5 7.0 (increments of 0.5)
- Fit function:
  - Gaussian
  - Inverted crystal ball
  - Adapted inverted crystal ball (2 sigmas) → Very stable fit





# ELET parameter spaces







### **ELET in BEGE**

