

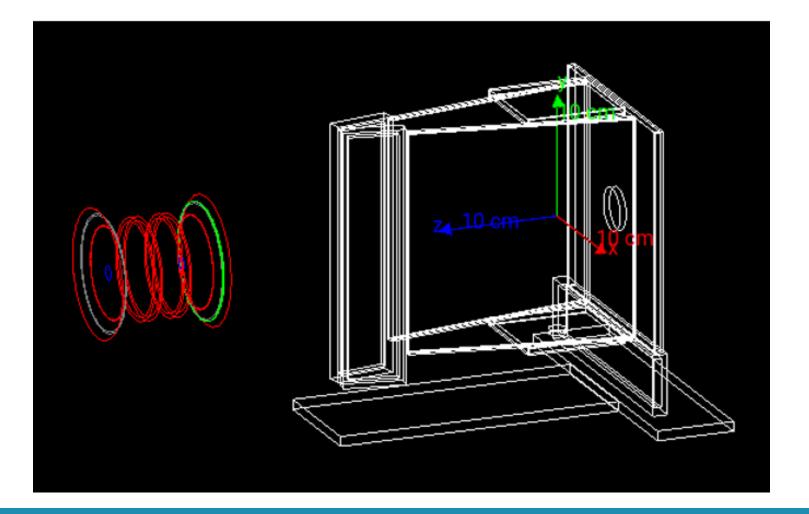
# Update muX meeting 26/07

Marie Deseyn

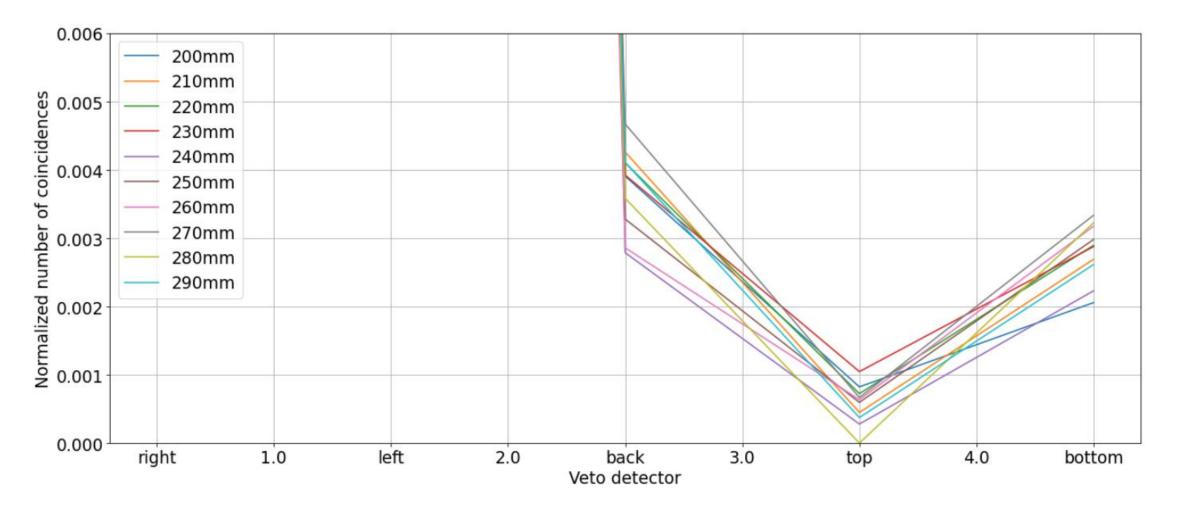
## **Geant4 simulations**

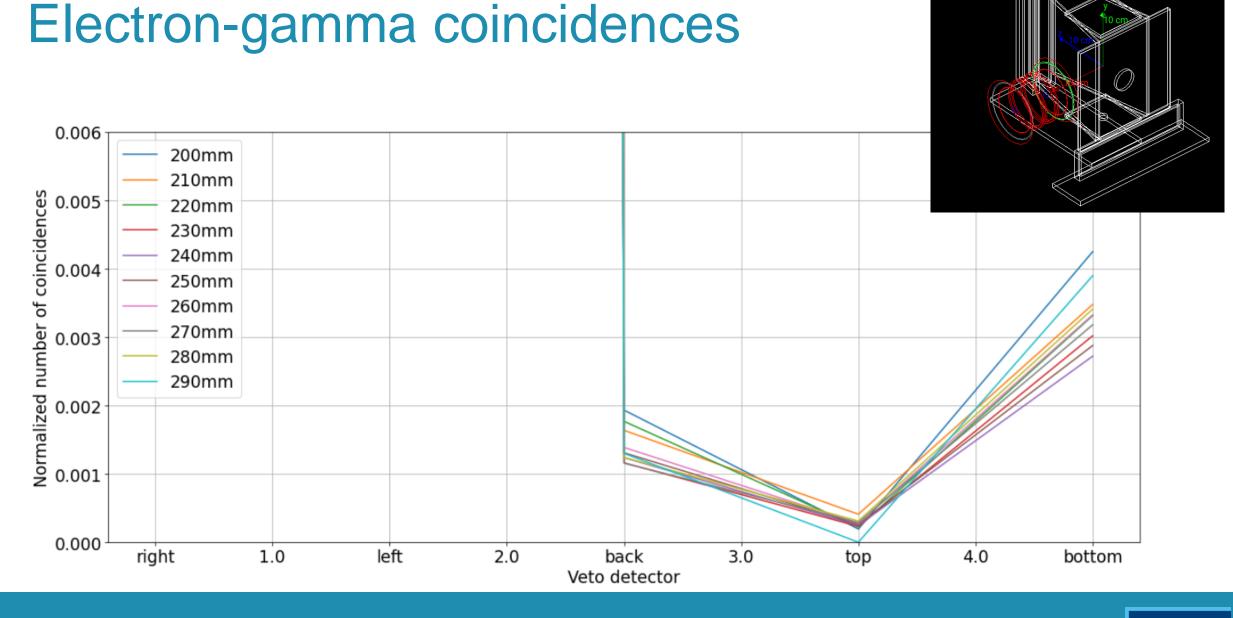


## Electron-gamma coincidences



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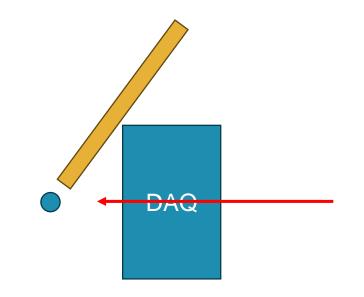
#### Department of Physics and Astronomy, IKS KU LEUVEN

## Electron-gamma coincidences

- More electron-gamma coincidences in bottom vs. top → most likely because more brehmstrahlung is generated for bottom electrons due to the aluminum support structure
- Last year, the scintillator with the hole was the bottom one → Should we switch this such that the scintillator with the hole is now on top? (because there will be less Brehmstrahlung generated from electrons going up)

### Geant4

• What are the ranges of the detector arms



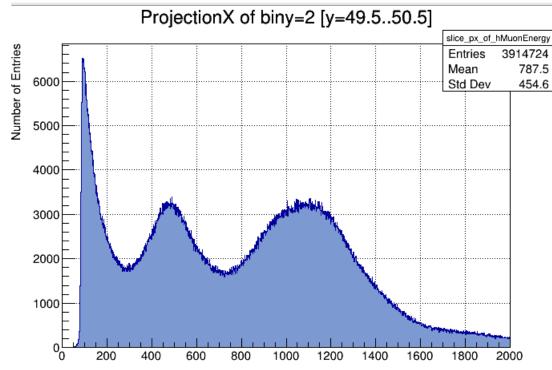
• What is minimal angle between 2 arms

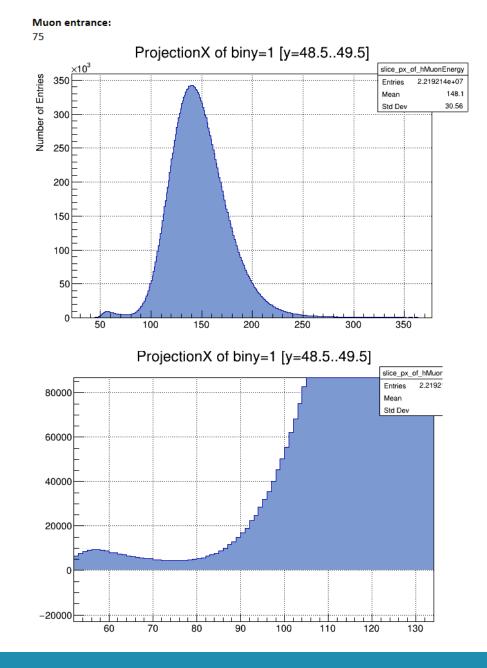
## Au-Pb data analysis



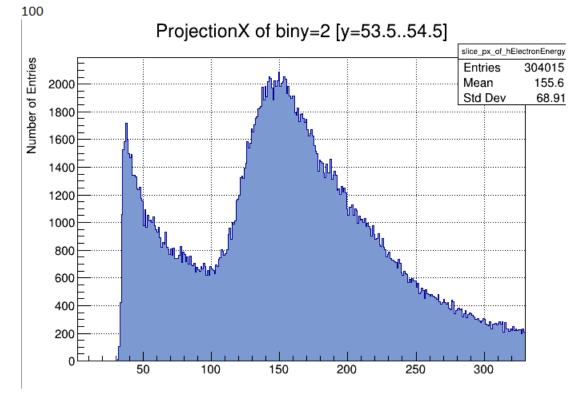
#### Muon veto:

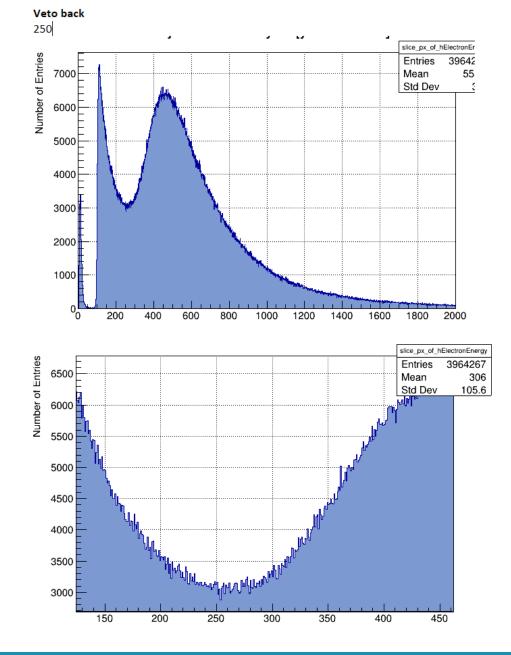
No cut --> Threshold = 0

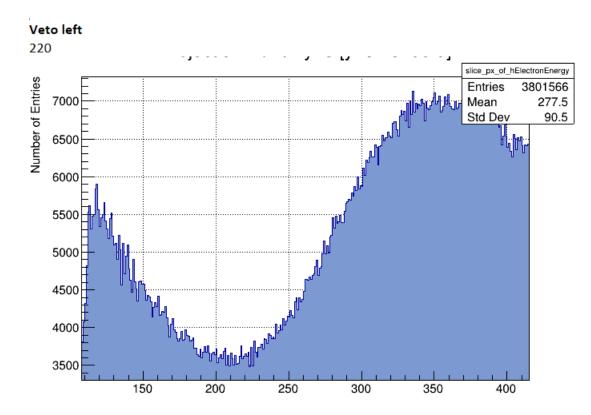




#### Veto bottom







#### Veto right 220 PT0JeCli0HA 0LDHY=4 [y=55.5..50.5] slice\_px\_of\_hElectronEnergy Number of Entries Entries 2968396 6500 Mean 248.6 Std Dev 68.59 6000 5500 5000 4500 4000 3500 ባገኘ ሰፈን 3000 150 200 250 300 350

