

Update on FCC-ee LAr Calorimetry

FCC-ee Detector Meeting

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Dedicated Tutorial at FCC Software Workshop

- Notebook “FccCaloPerformance” which shows the step-by step workflow to arrive at performance results:



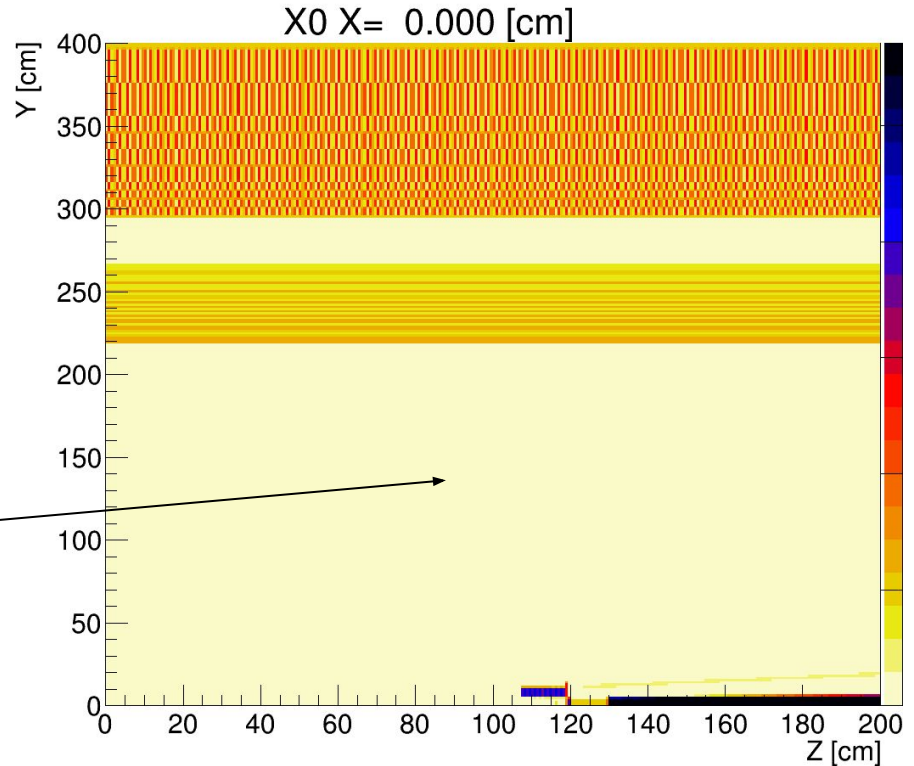
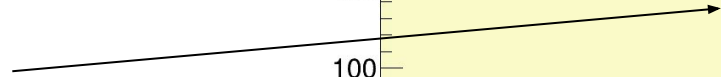
Take-aways from FCC Week Brussels - Further Plans

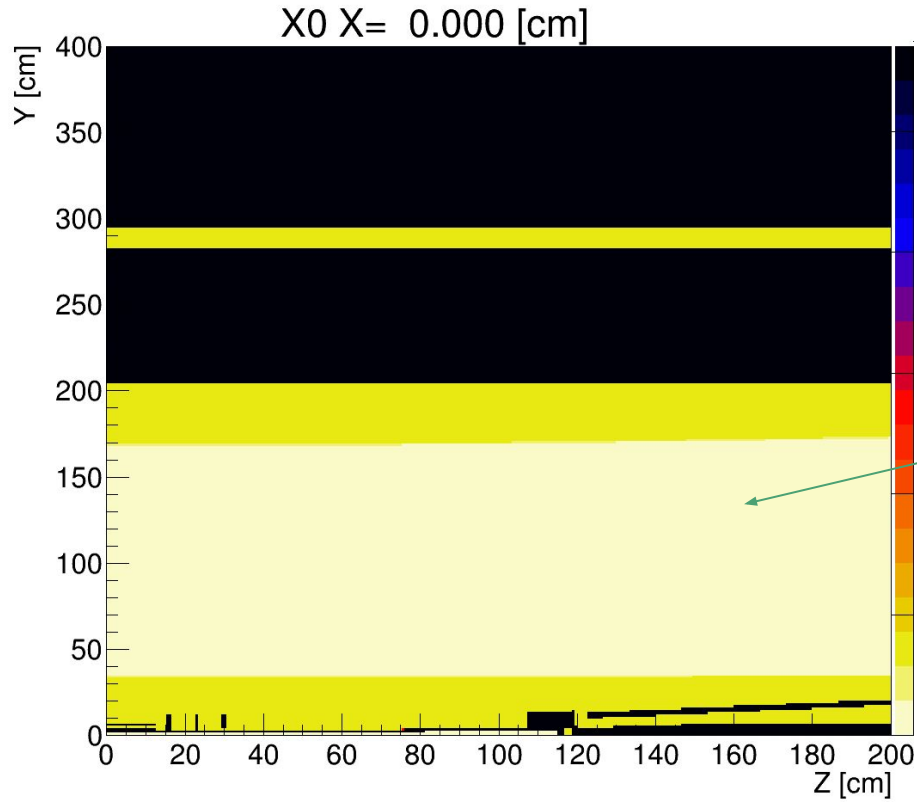
- Photon energy resolution
 - Calculate performance down to 500 MeV
- Jet performance
 - Particle Flow / Track - Calo Matching absolutely necessary
 - Will focus on ConformalTracking for Driftchamber Reconstruction
 - Custom Extrapolation for Matching
- Backgrounds

Detector Geometry Updates

- DD4hep put in some developments into new Material Scan Plots. Using these new tools, noticed some things that need to be updated

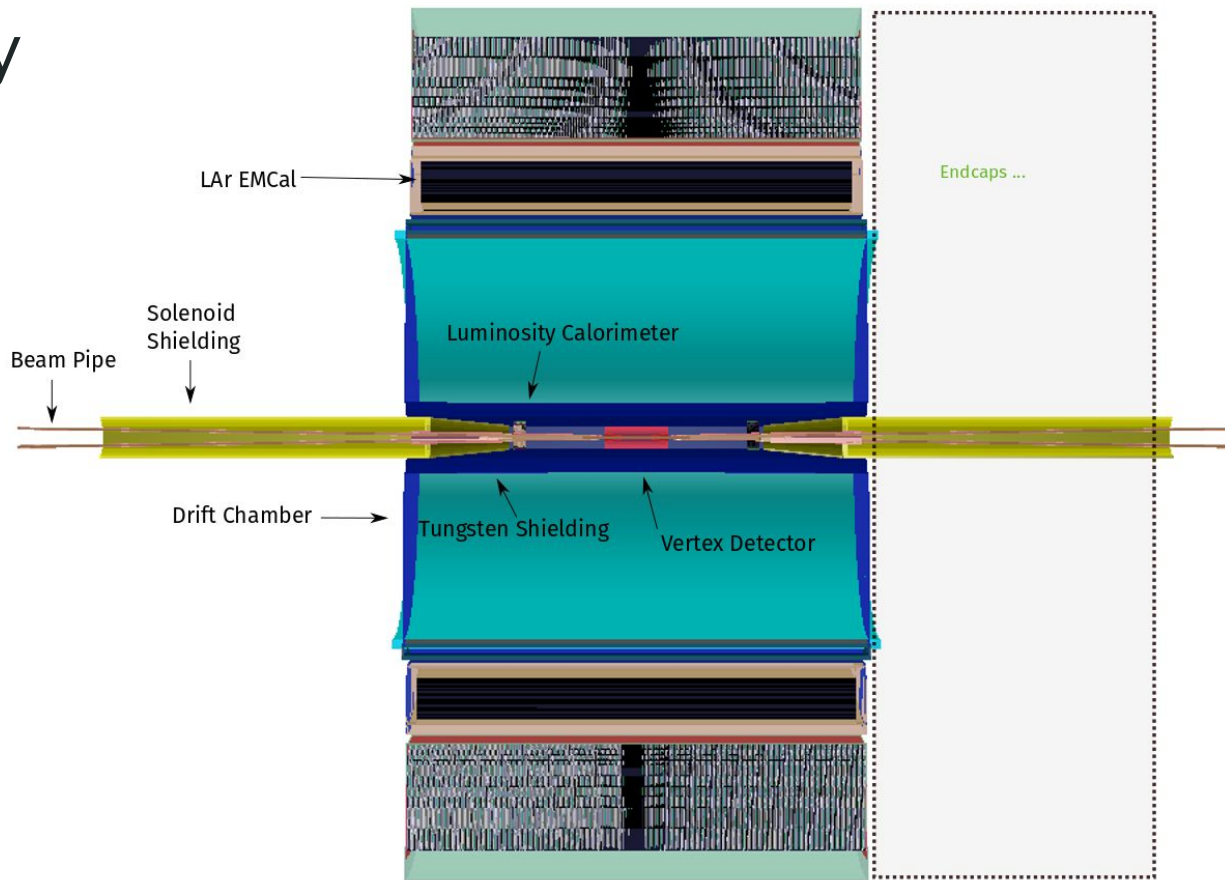
DriftChamber?





It's there, but only
the gas/wire mixture
which is very light

Detector Geometry Update: Endcaps



Beam Backgrounds

- Yorgos made an extensive effort to document his setup for Beam Background simulations
- Already used for studies of the Driftchamber (<http://cds.cern.ch/record/2670936/>) :
- Created a new repository for GUINEA-PIG in collaboration with CLICSW
 - <https://gitlab.cern.ch/clic-software/guinea-pig>
- Not clear if the calorimeter is affected, but should be studied.

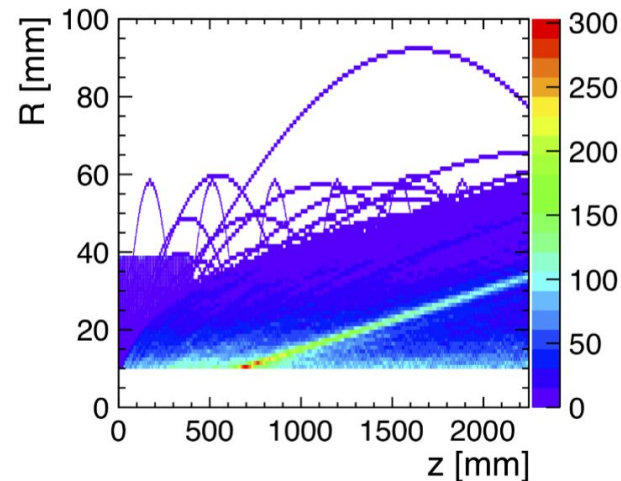


Figure 7: The trajectory of the e^+e^- pairs in a 2 T magnetic field.