Photon Identification. Barrel conversions

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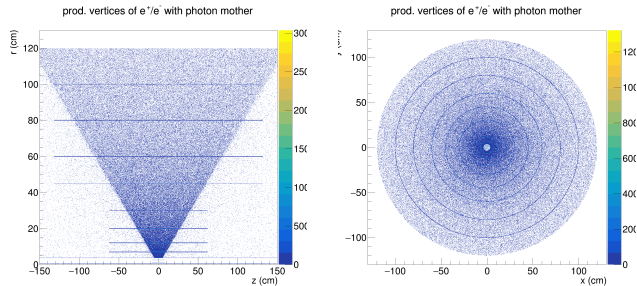
Simulation settings

- ▶ Full simulations of pp $\sqrt{s} = 14$ TeV using PYTHIA 8.2 in local HD cluster (2.2×10^6 events generated) . Thanks D. Chinellato for sim package
- ▶ First analysis using MC information
- ▶ Analysis using reconstructed tracks

ALICE3 through a gamma-ray looking glass

ALICE: CERN Courrier 2013
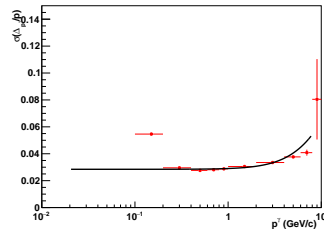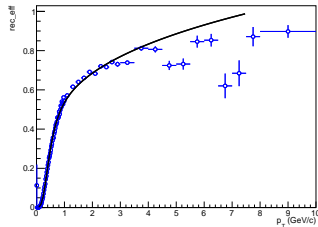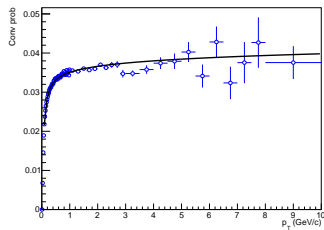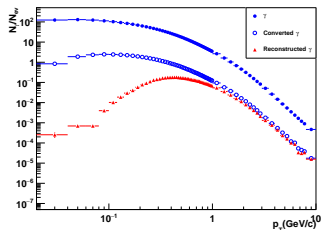

Tracker: 12 layers clearly visible

MC information used to located conversion vertices.

No reconstruction yet.

Photon conversions

Limit the conversion radius to 22 cm:
7 layers for conversion and 5 layers for reconstruction

Photon conversions

1. $\chi_C \rightarrow J/\psi + \gamma$ simulation started using DelphesO2
2. γ information and Preshower information stored in the AO2D.root

χc