

# Fake Factor Estimation

Fakes: Jets faking leptons, and non-prompt  
leptons

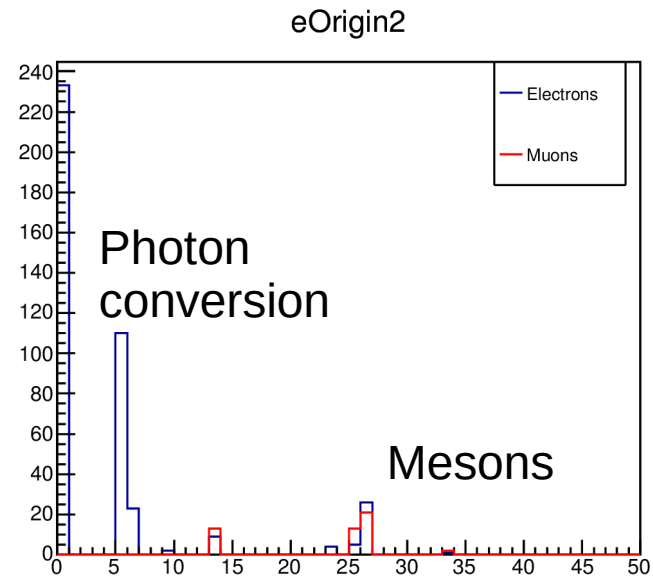
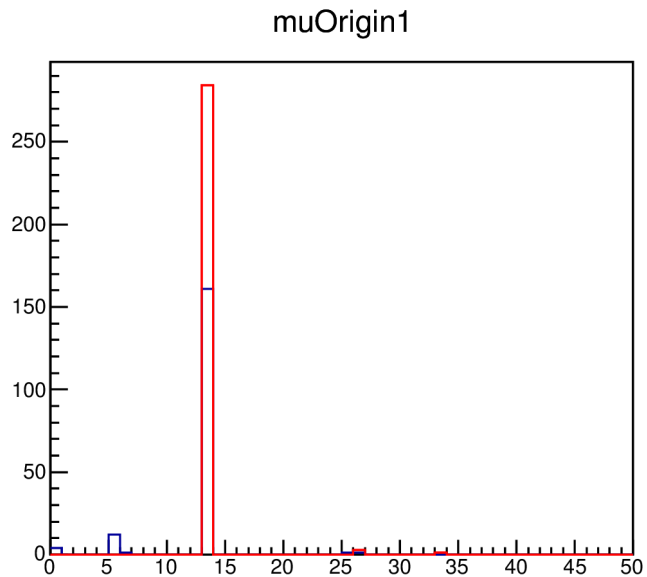
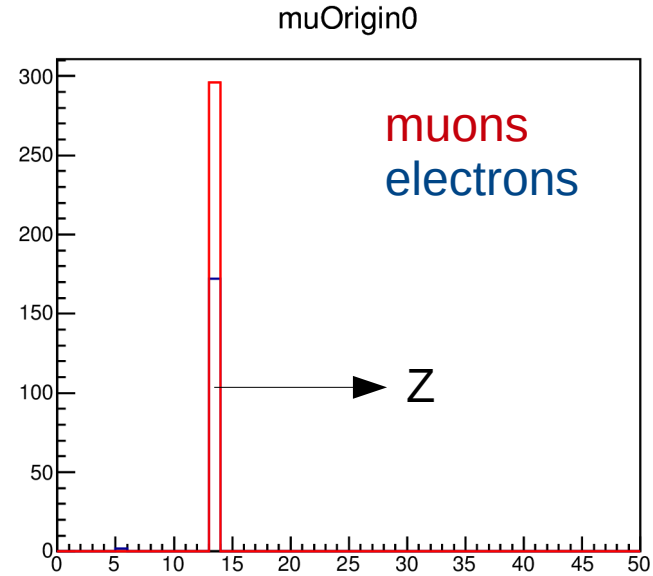
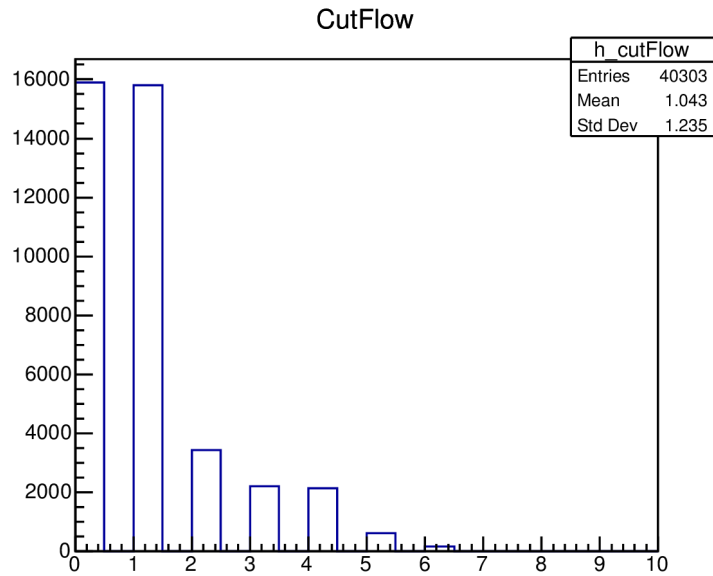
Real: Prompt leptons

# Region definition

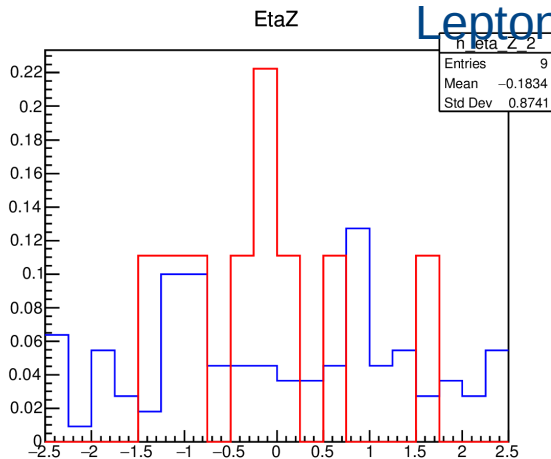
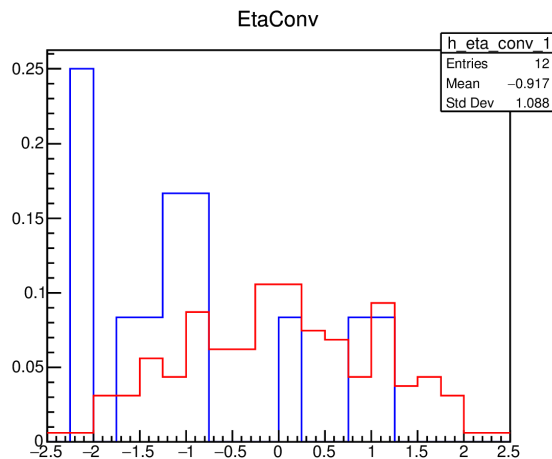
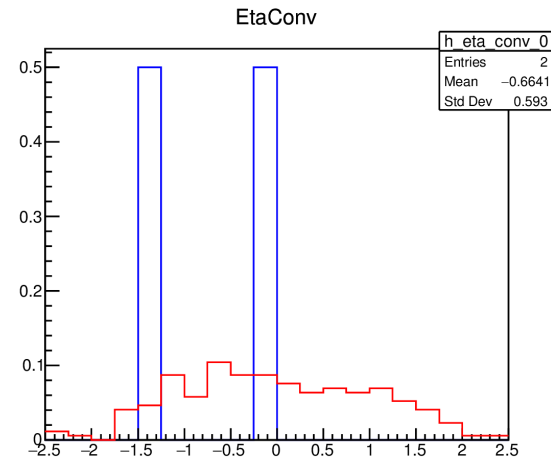
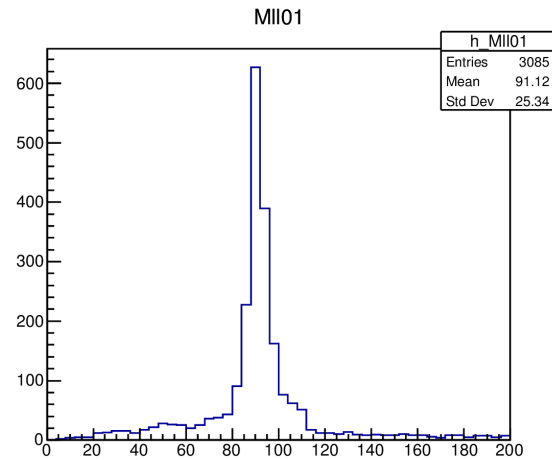
## **Z+ jets CR1**

- 3 leptons,  $PT > 20$  GeV
  - At least 1 jet
  - b-veto
  - Only events in Z-window
  - MET < 30
  - Anti-tight isolation
- Aim is to study the truth information in Z+jets MC

# Origin of the leptons



# Eta of leptons



Leptons from Z  
Leptons from gamma

- If leptons are from conversion, expect them to be forward. → Not the case

# Issues

- Third lepton rarely comes from a jet
  - Mostly photon conversion
  - How to deal with this?