First analysis of Jets
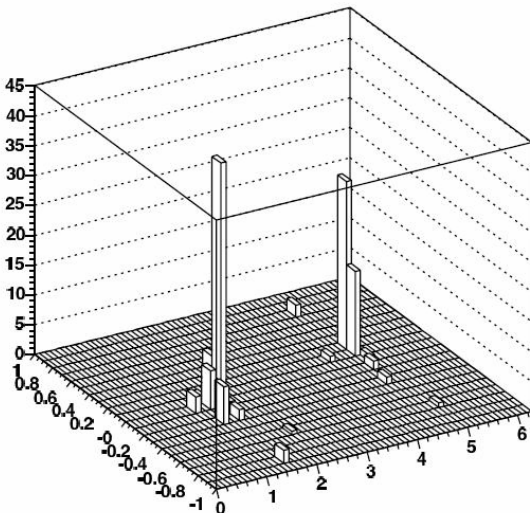# from p-p collisions at LHC √s = 14 TeV.

Leonid Serkin

(HELEN-ICN)

2x10^6 events produced during the Physics Data Challenge 06
# Minimum bias events

- Inelastic hadron-hadron events selected with an experiment's "minimum bias trigger".
- Usually associated with inelastic non-single-diffractive events

- Need minimum bias data if want to:
  1) Study general characteristics of proton-proton interactions
  2) Investigate multi-parton interactions and the structure of the proton etc.
  3) Understand the underlying event: impact on physics analyses?

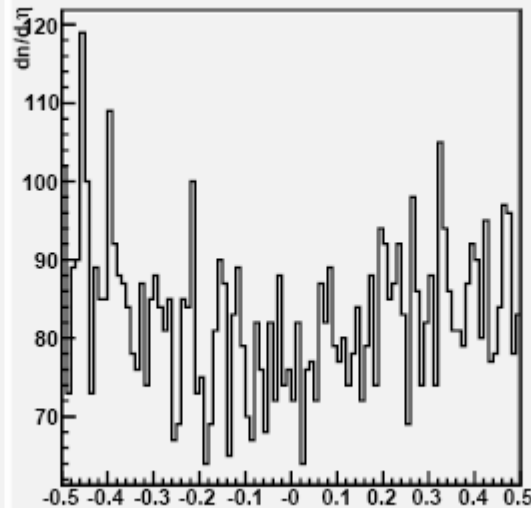# Jet Reconstruction using Analysis Object Data
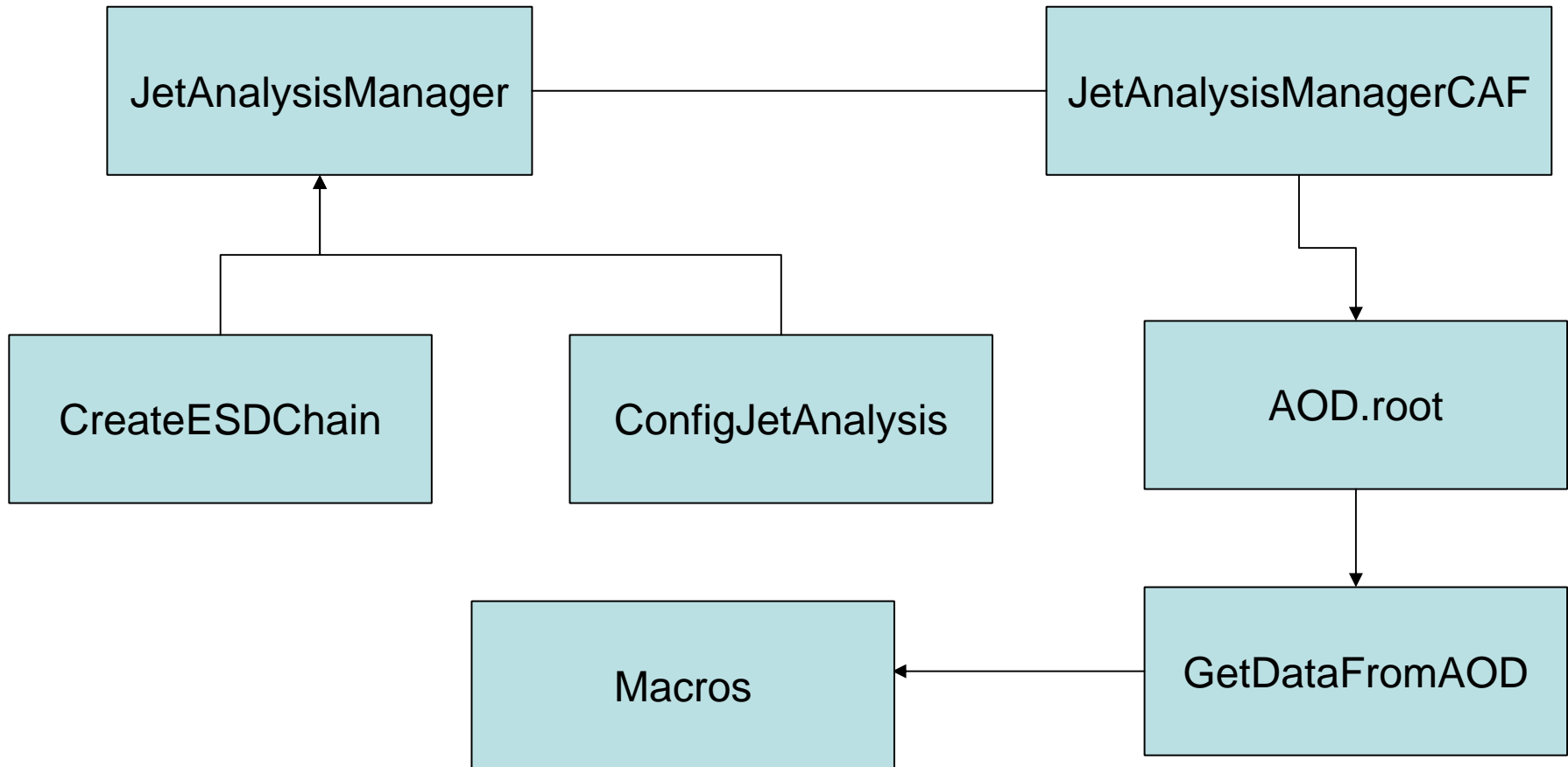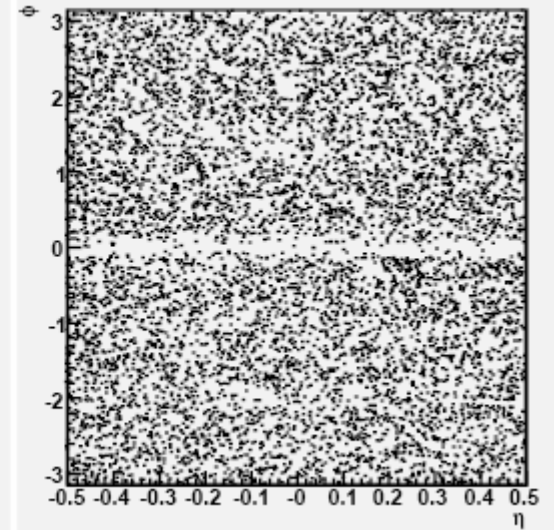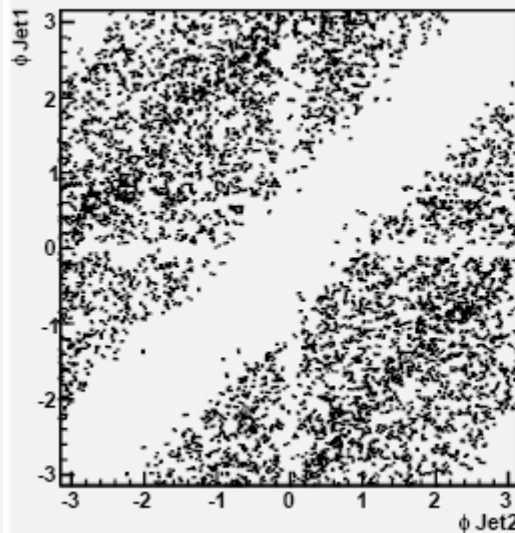
First results using CAF data
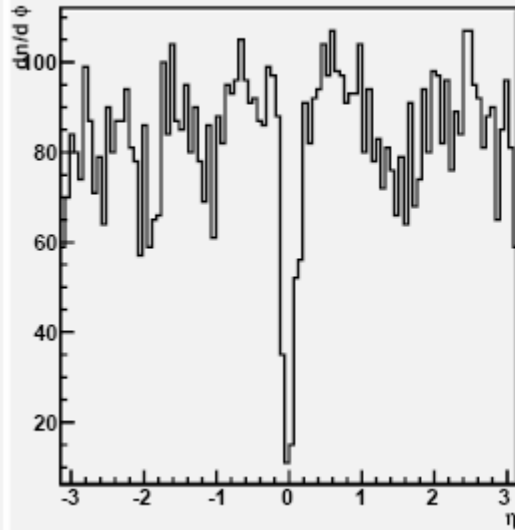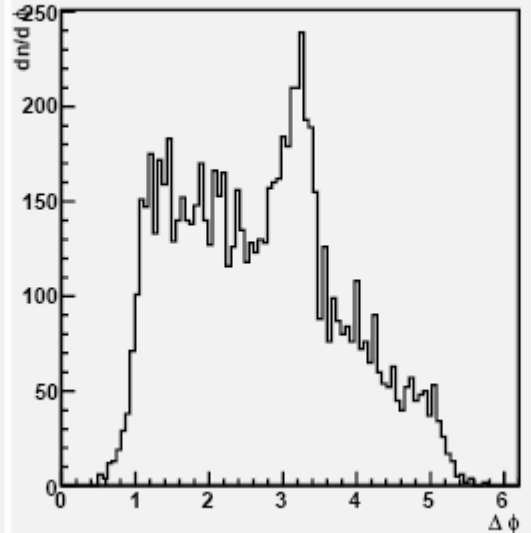
Distribution of Delta Phi
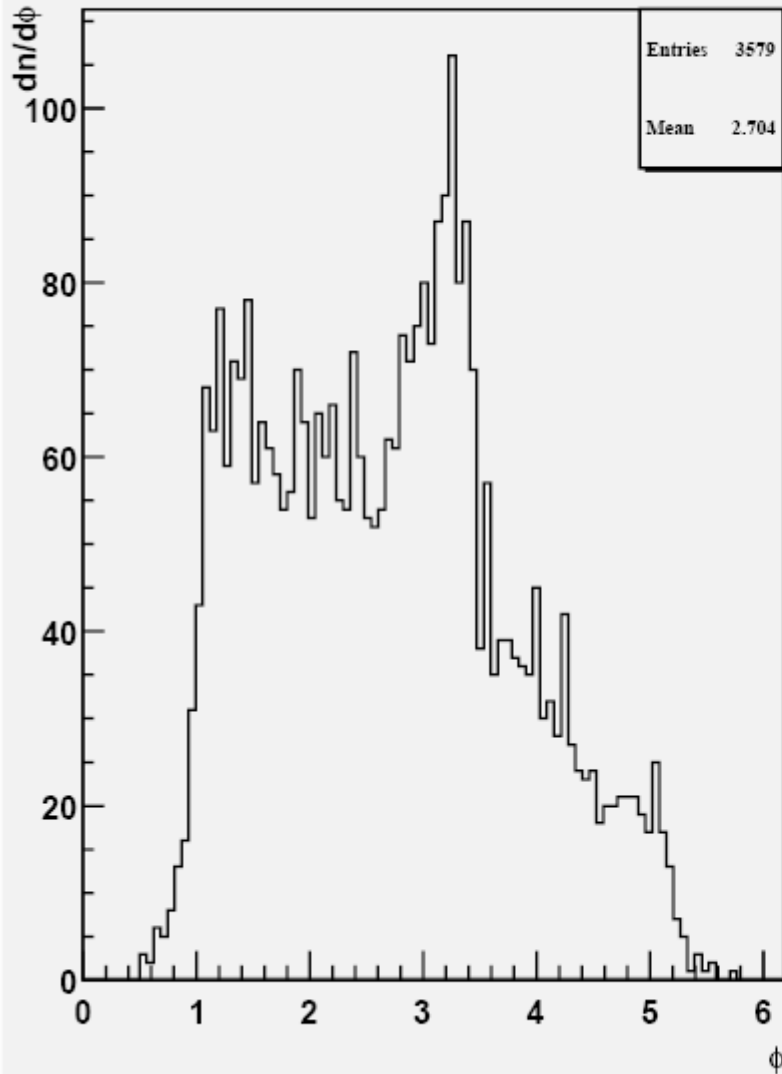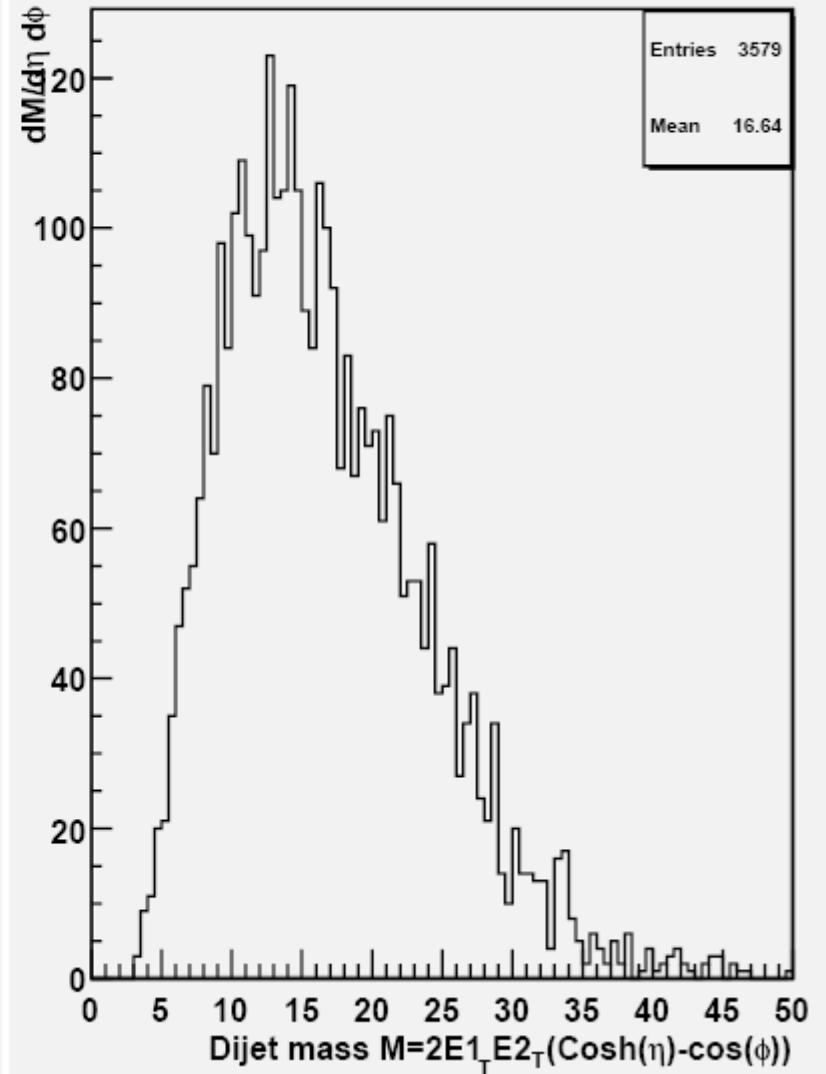
Distribution of Energy

dn/dE

Energy of jets
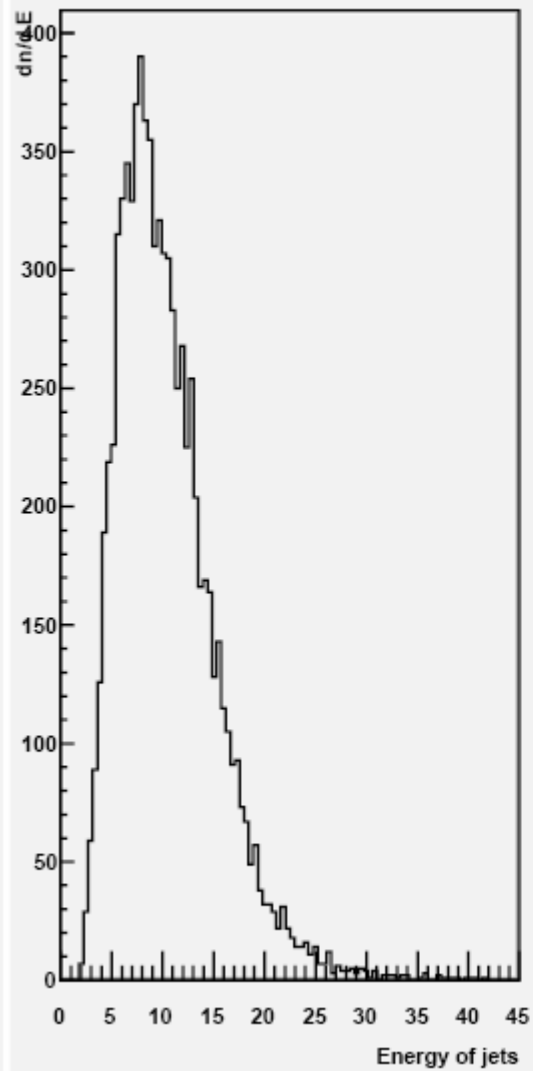
Distribution of Pt

dn/d Pt

Pt
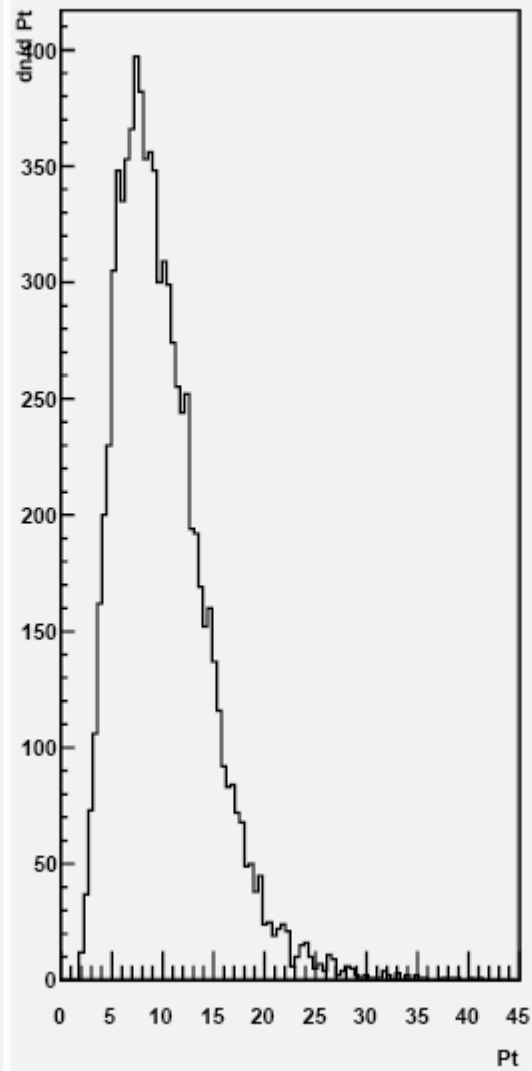
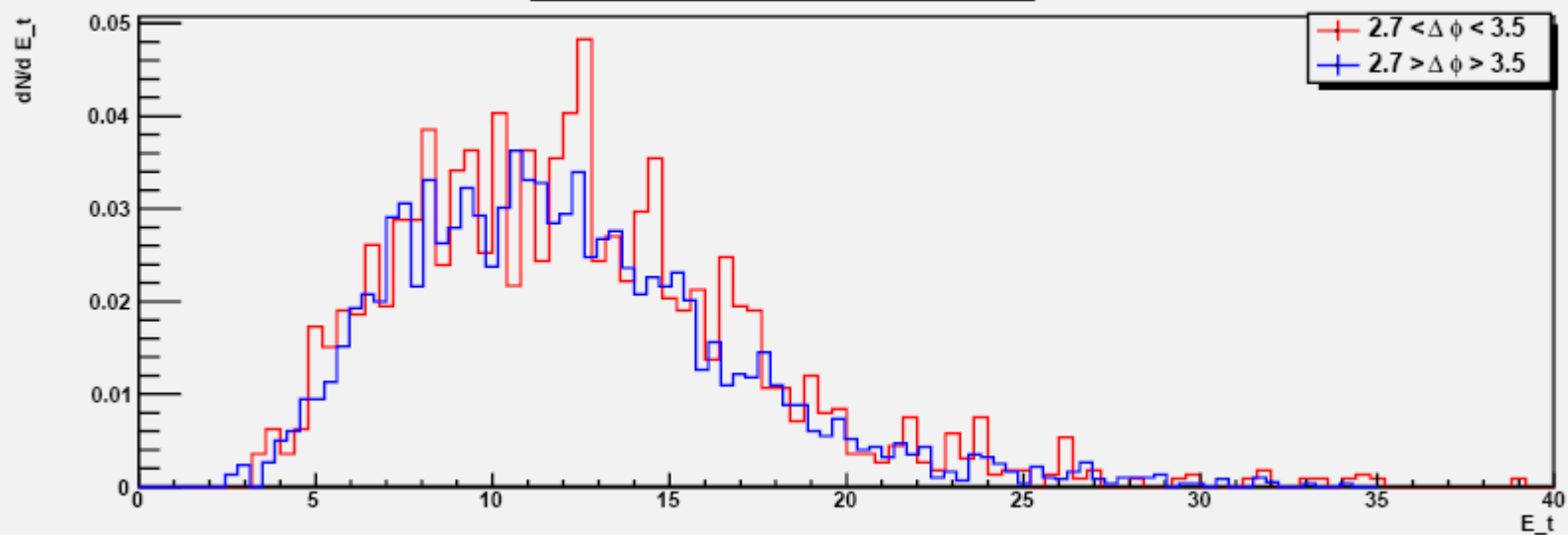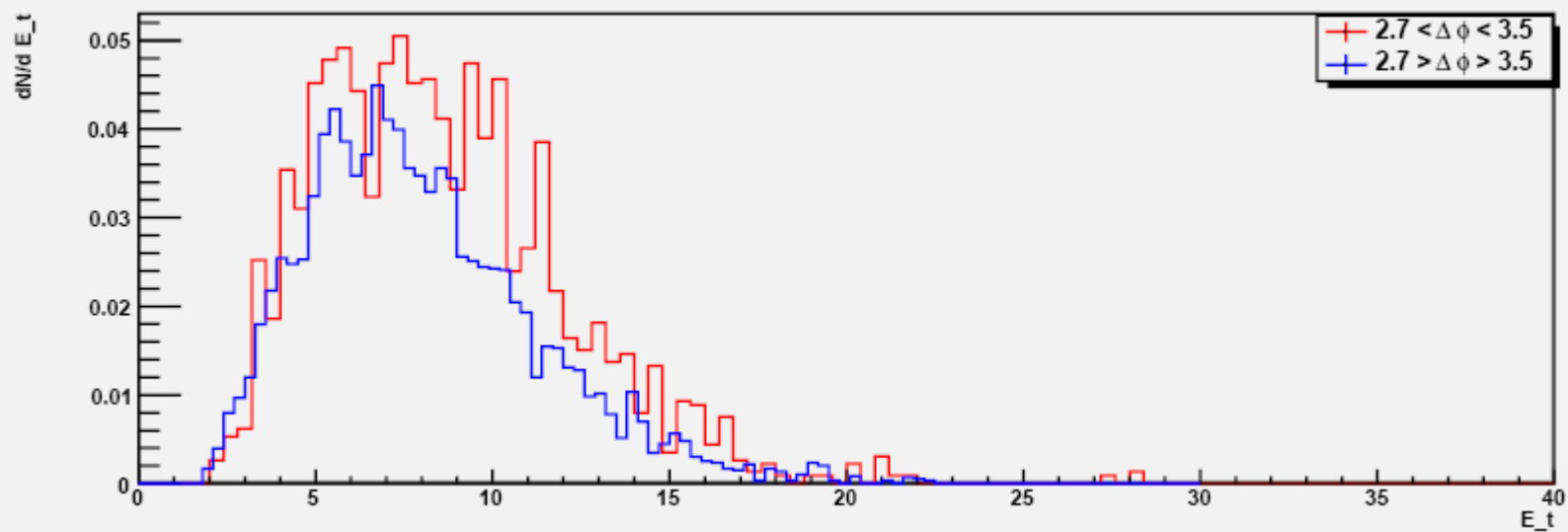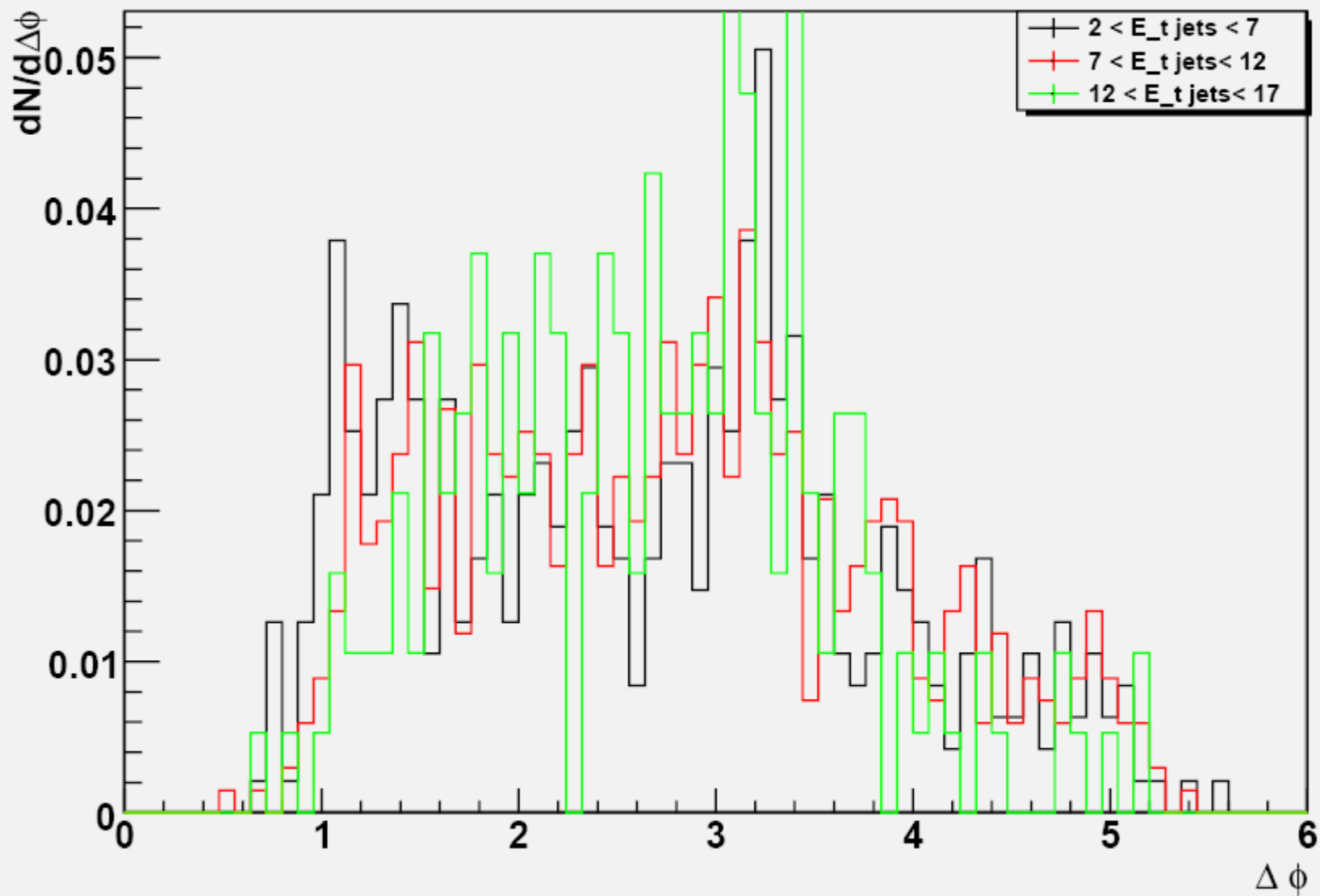**Distribution of E/Pt**

Pt

E
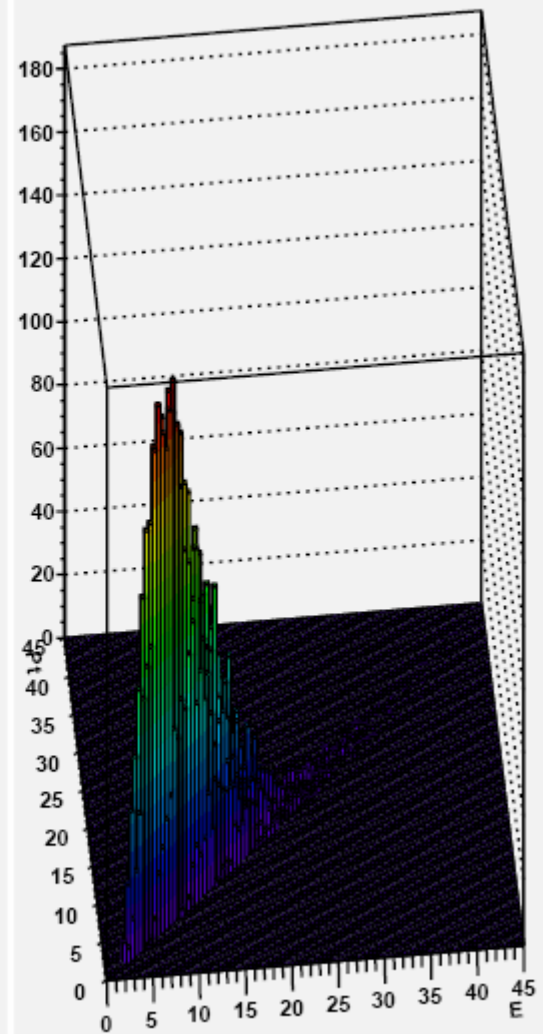
Normalized distribution of E_t of Jet 1

Normalized distribution of E_t of Jet 2

Normalized distribution of DPhi for different E_t energies of jets

To do:

- *More statistics*

- *Expected back-to-back correlations*

- *Transverse momentum correlations for jets*