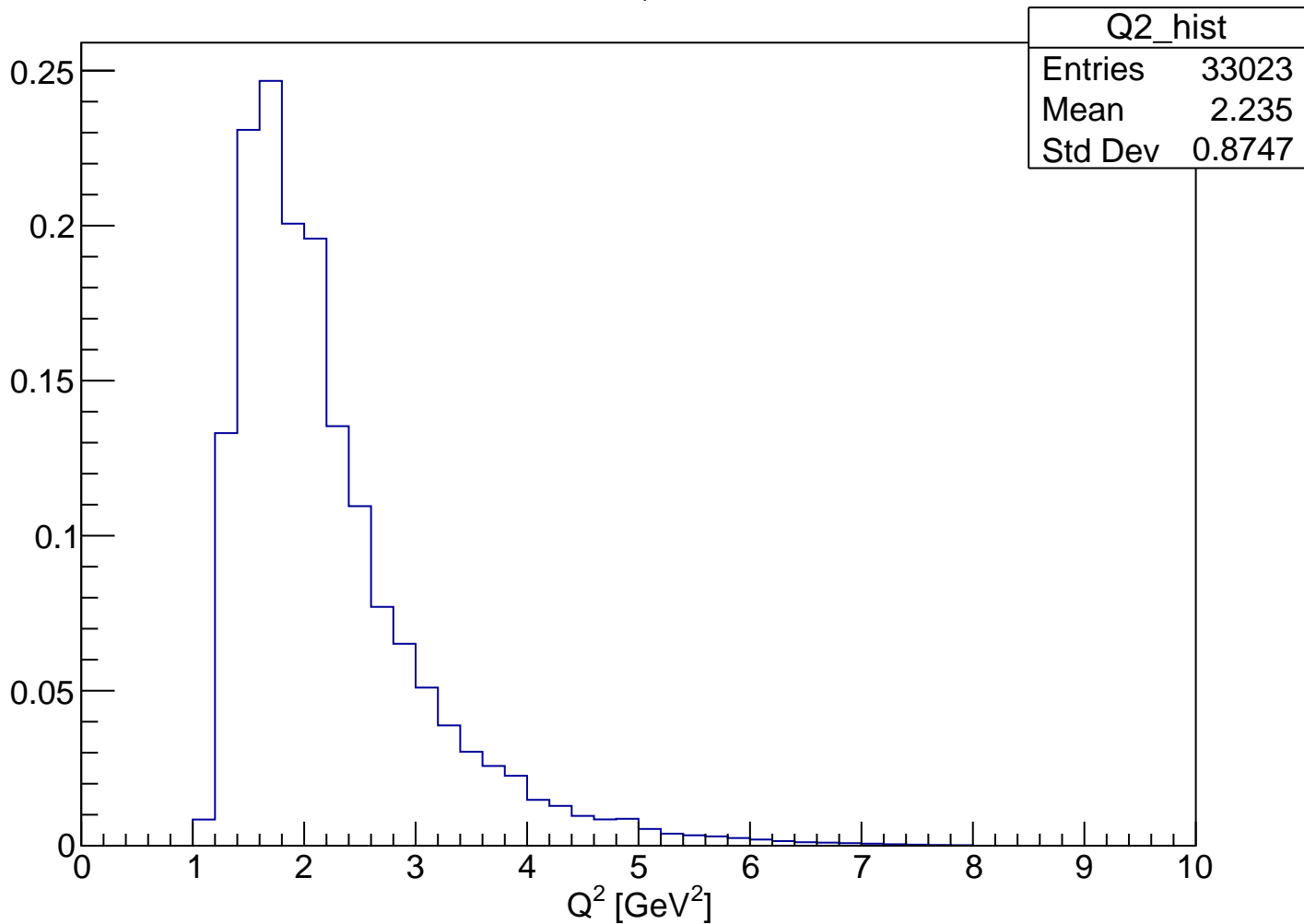


File : MC inbending without vertex correction

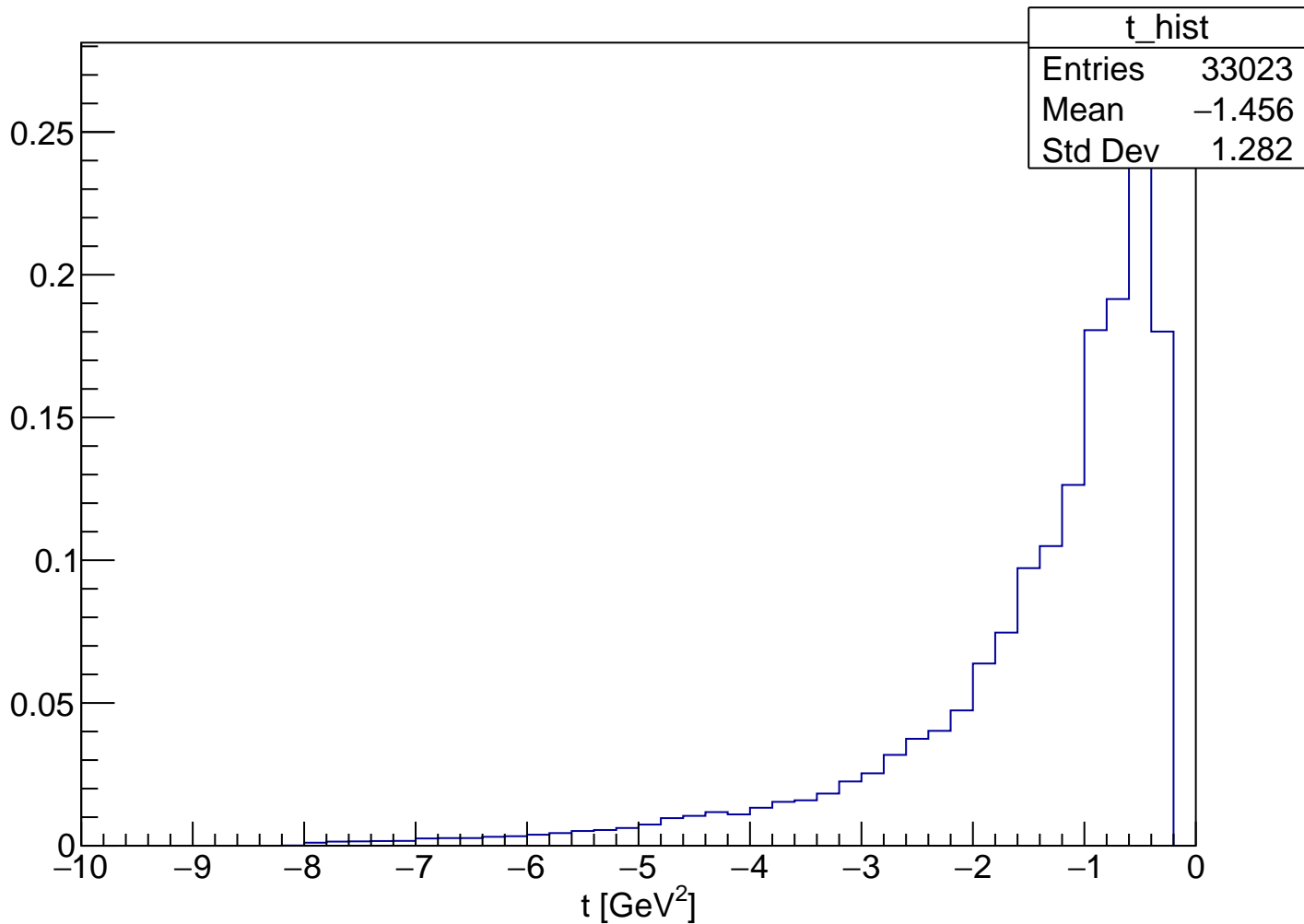
Number of generated events: 2 000 000

Summary of cuts for the next plots:

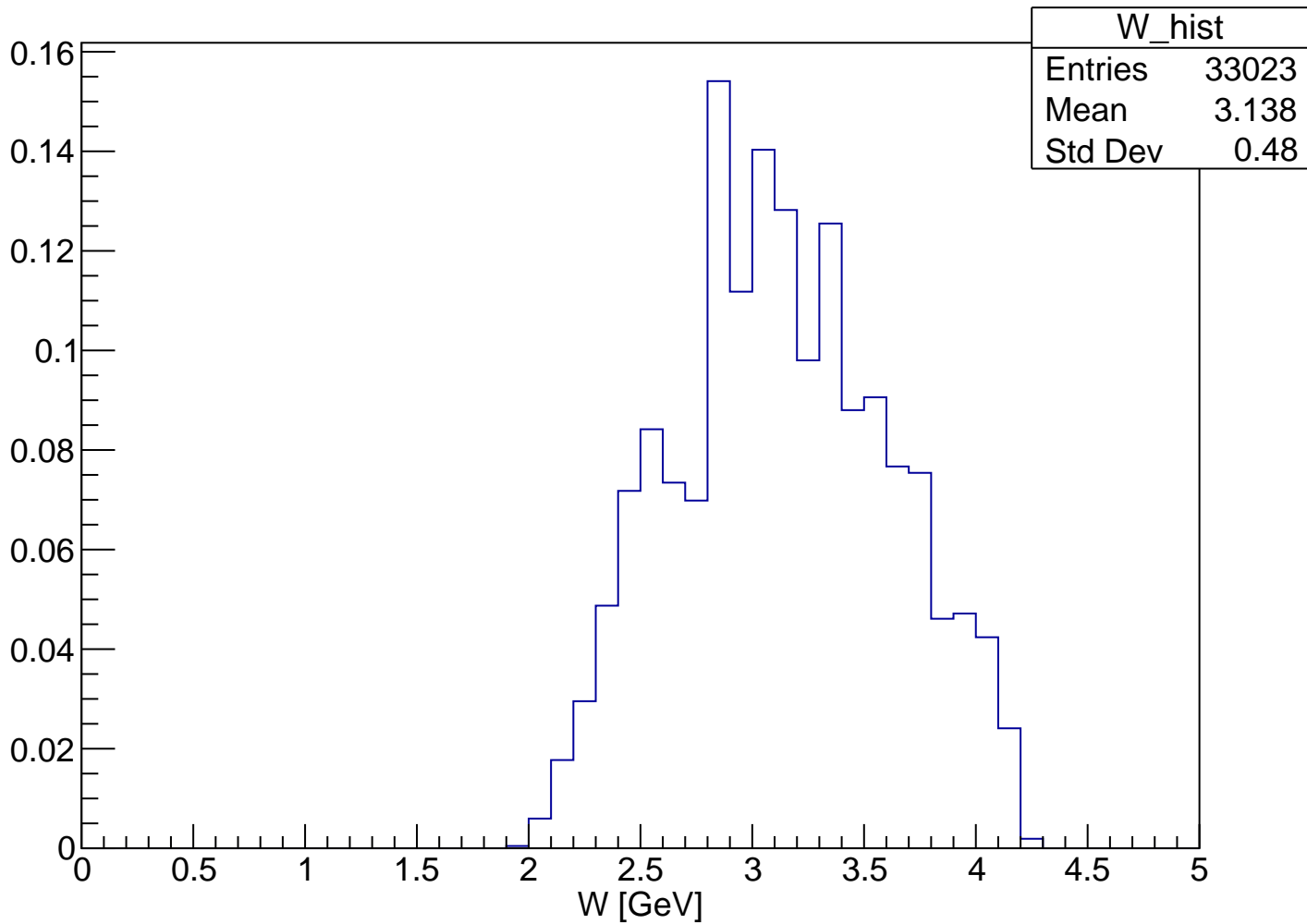
- Only 1 proton, 1 π^+ , 1 π^- , and 1 e^-**
- $Q^2 > 1$ -> electron FD**
- Very large cut on Missing mass, Invariant mass $\pi^+ \pi^-$
and Invariant mass Ks KI (cut between 0 and 3 GeV)**

Q^2 

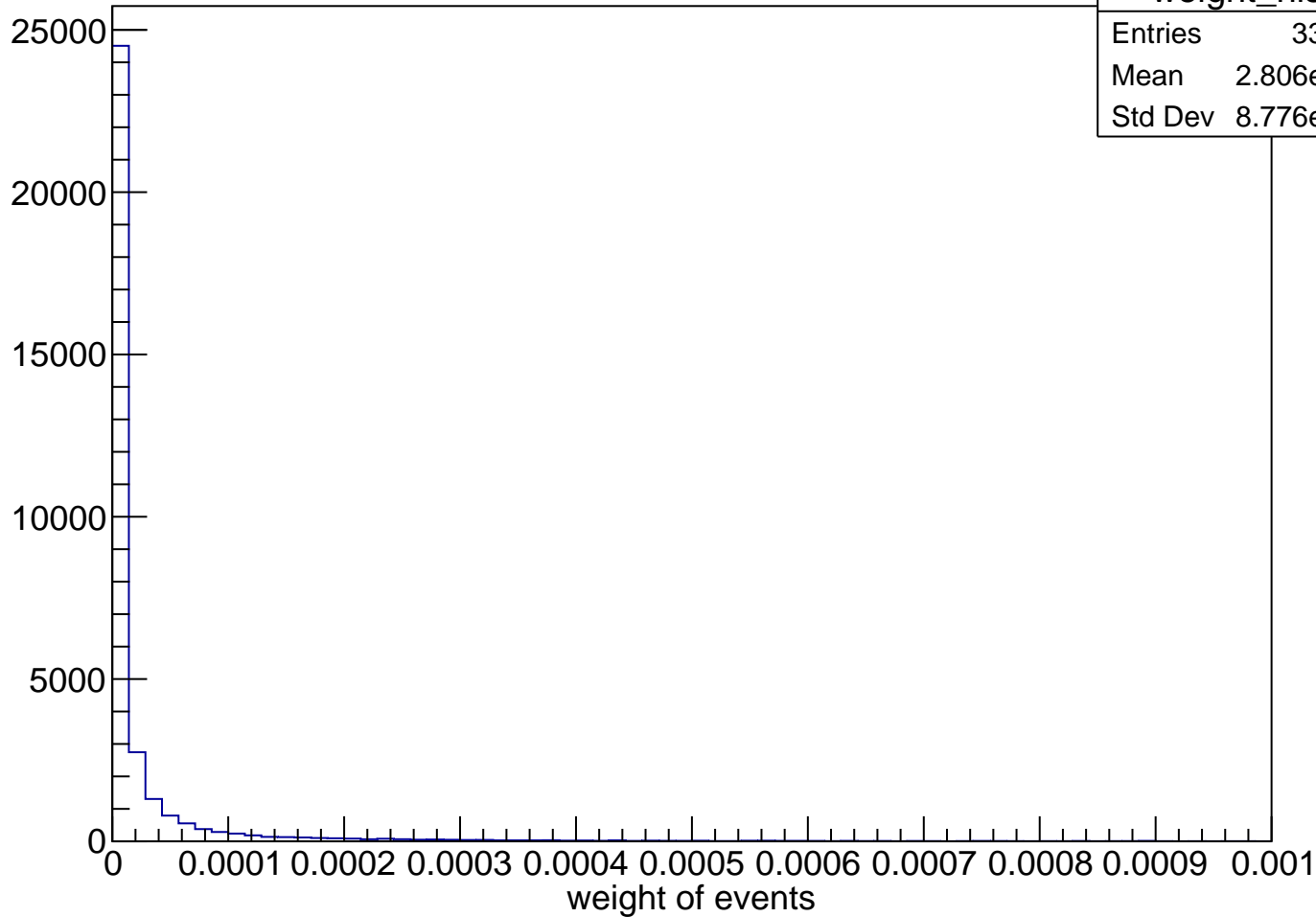
t



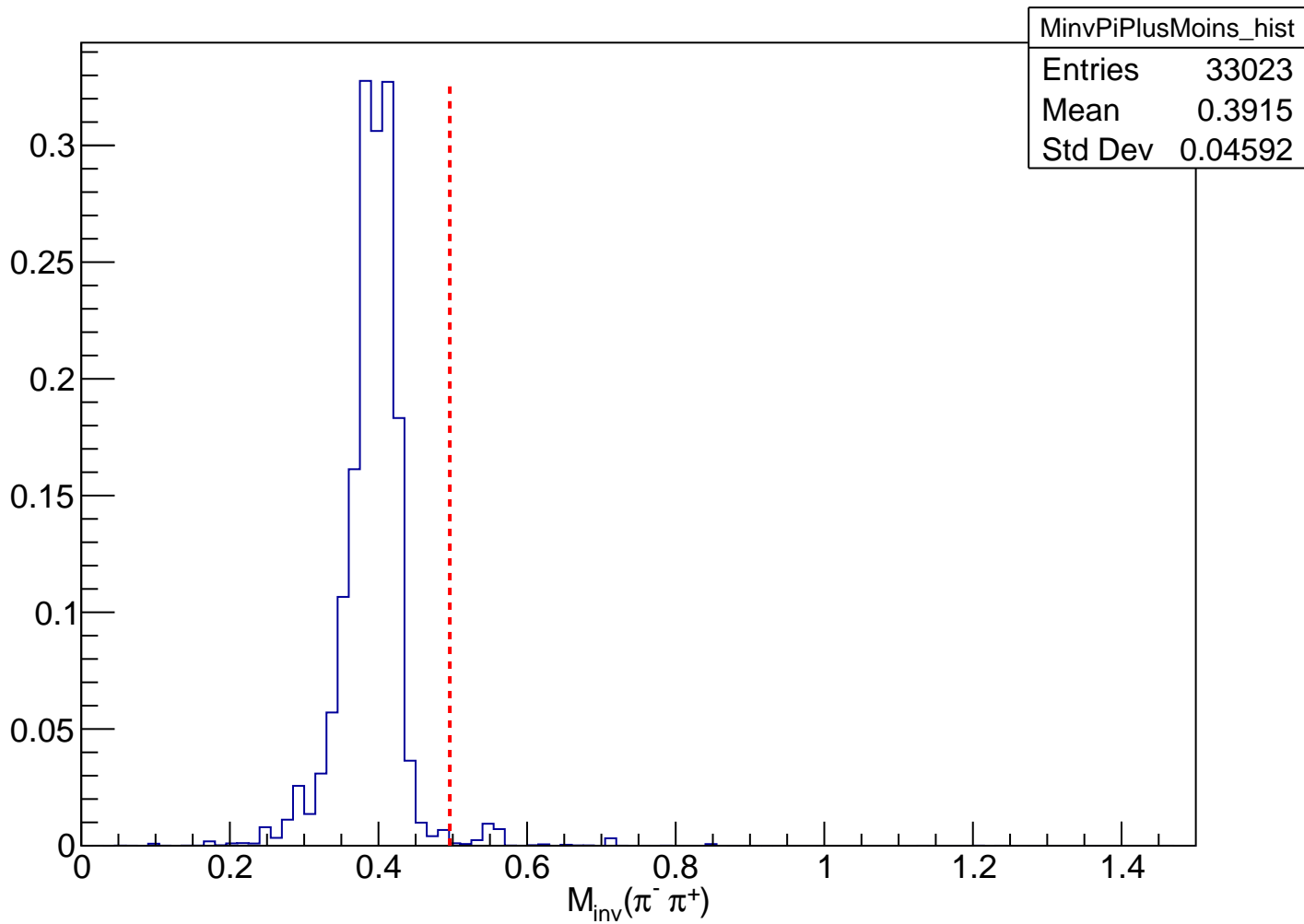
W



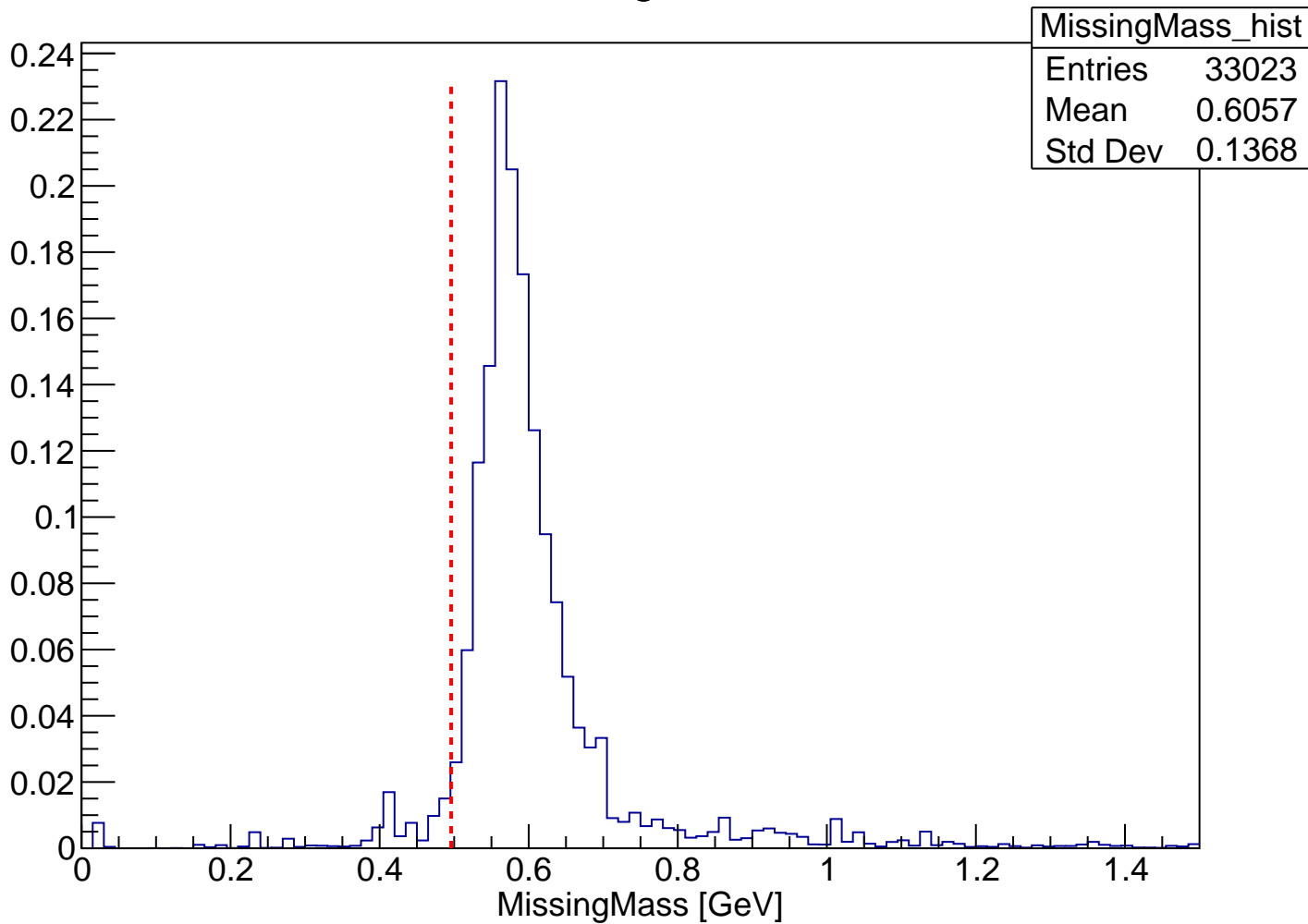
weight



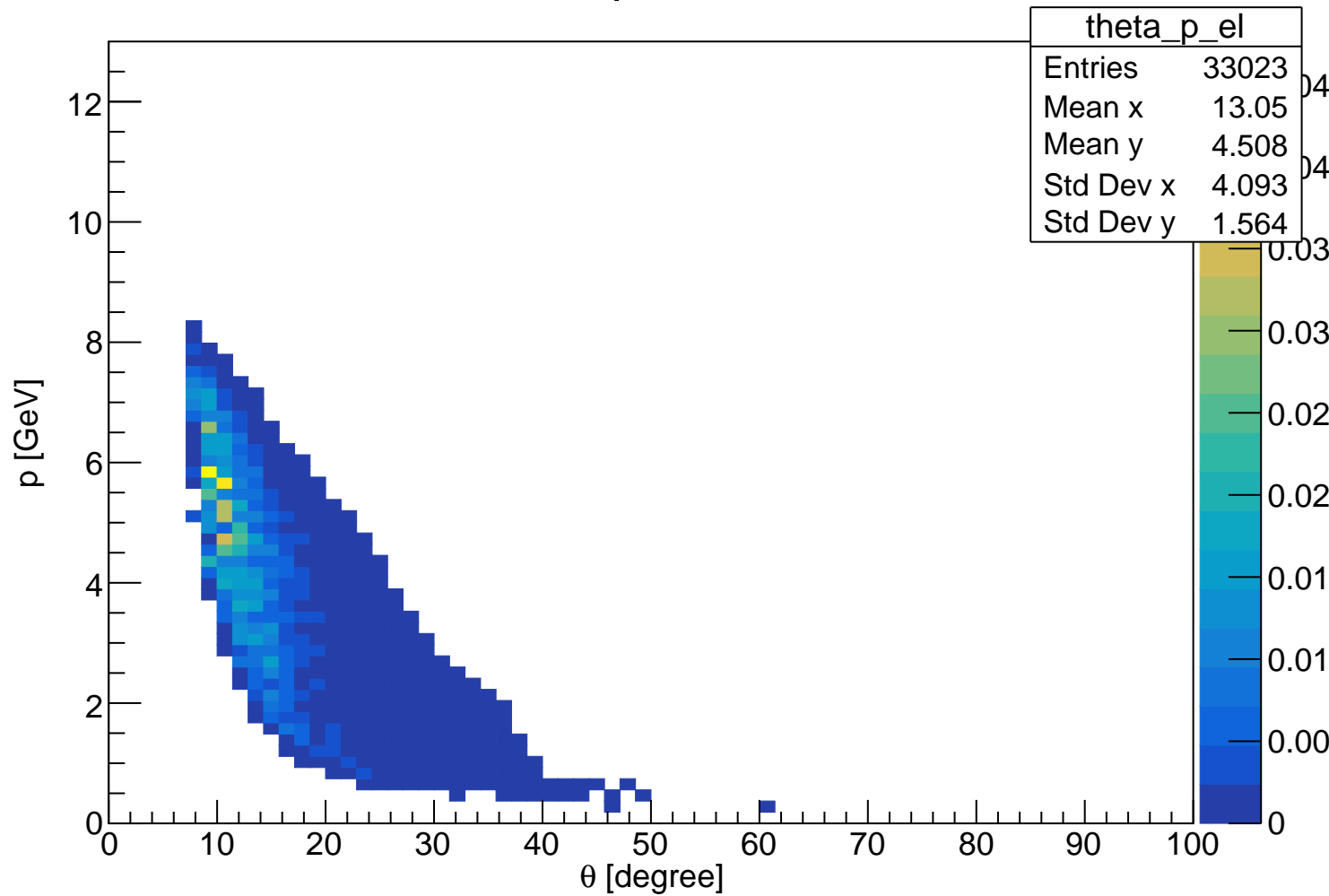
Invariant Mass $\pi^- \pi^+$



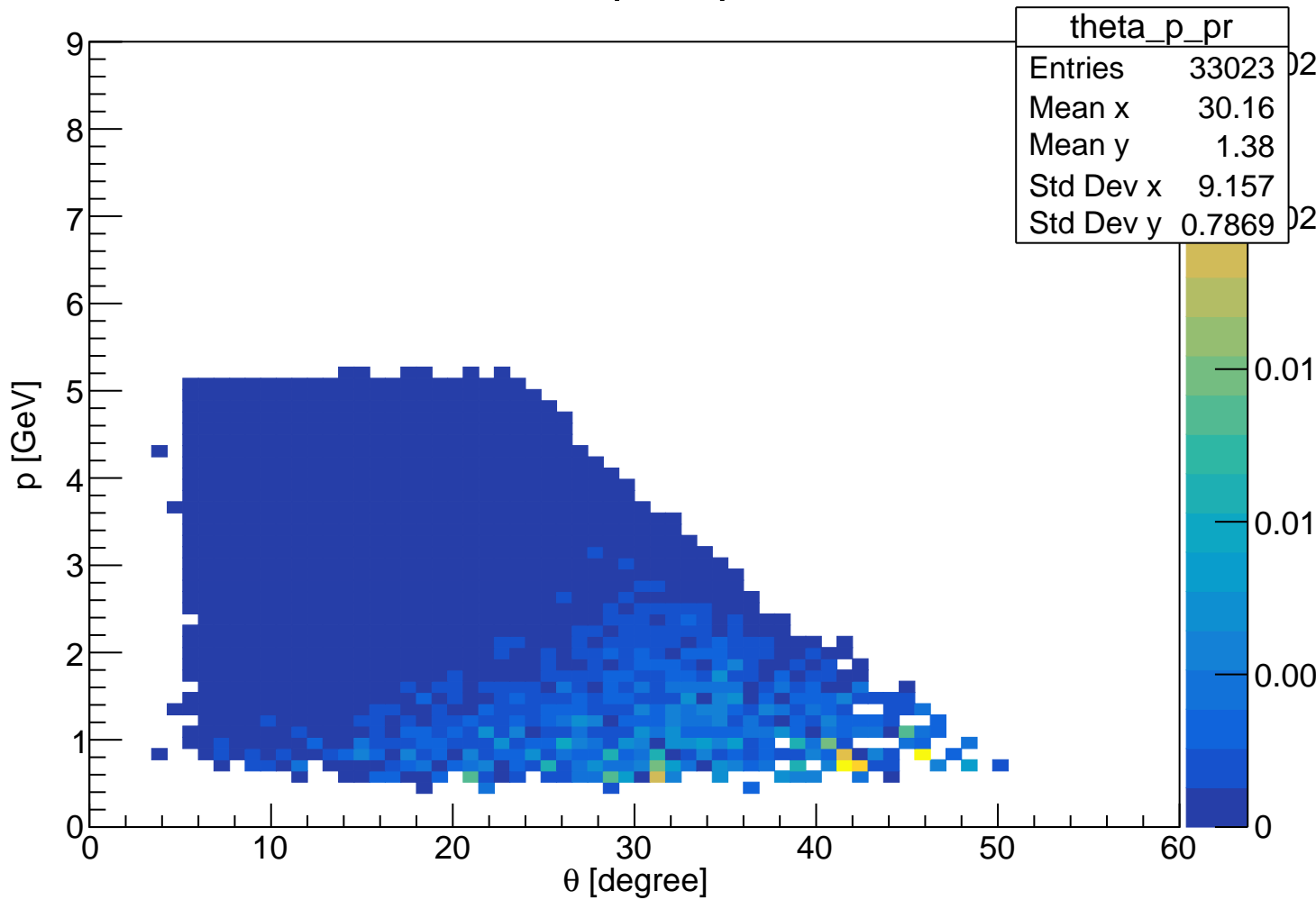
Missing Mass



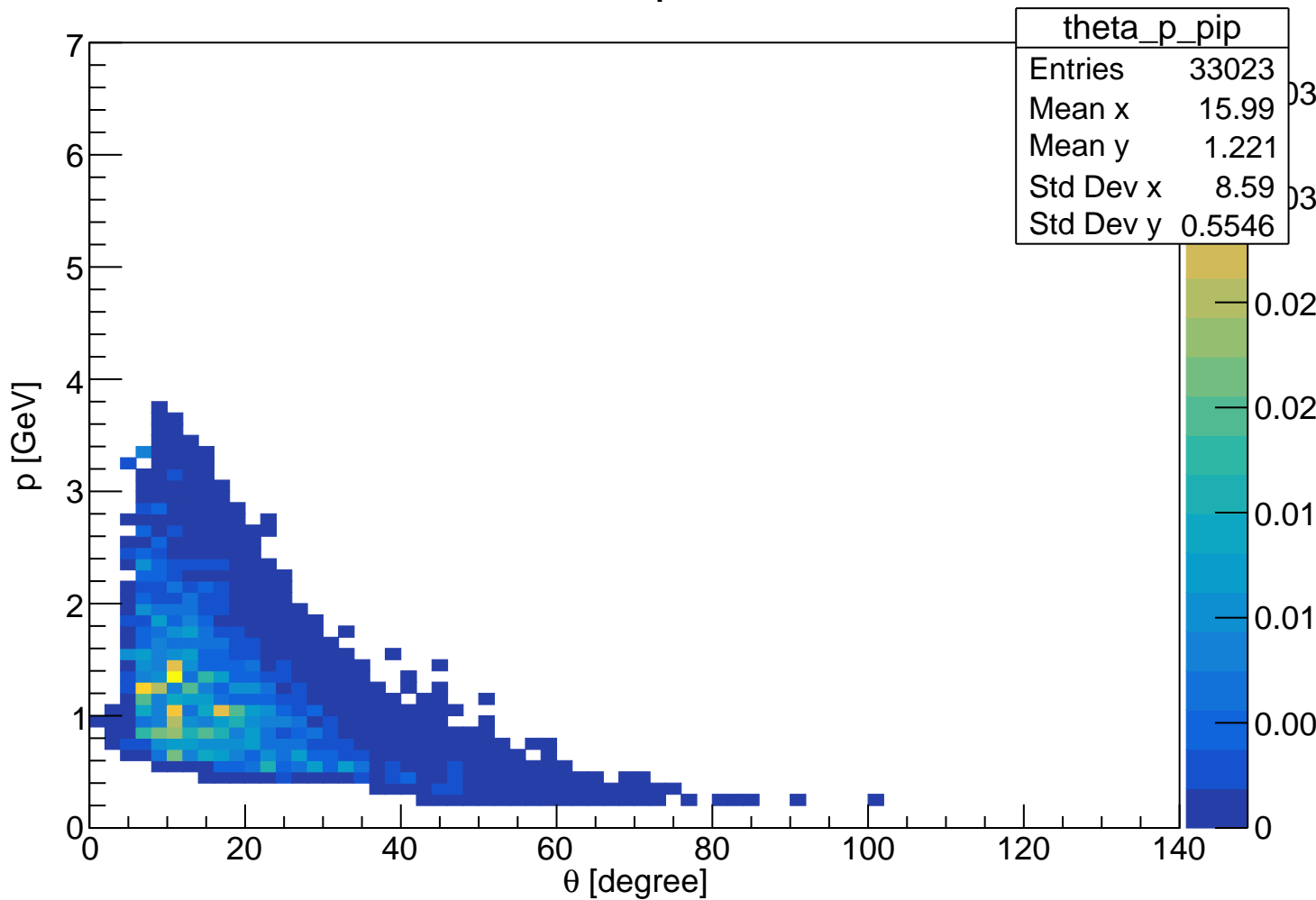
Theta vs p for electron



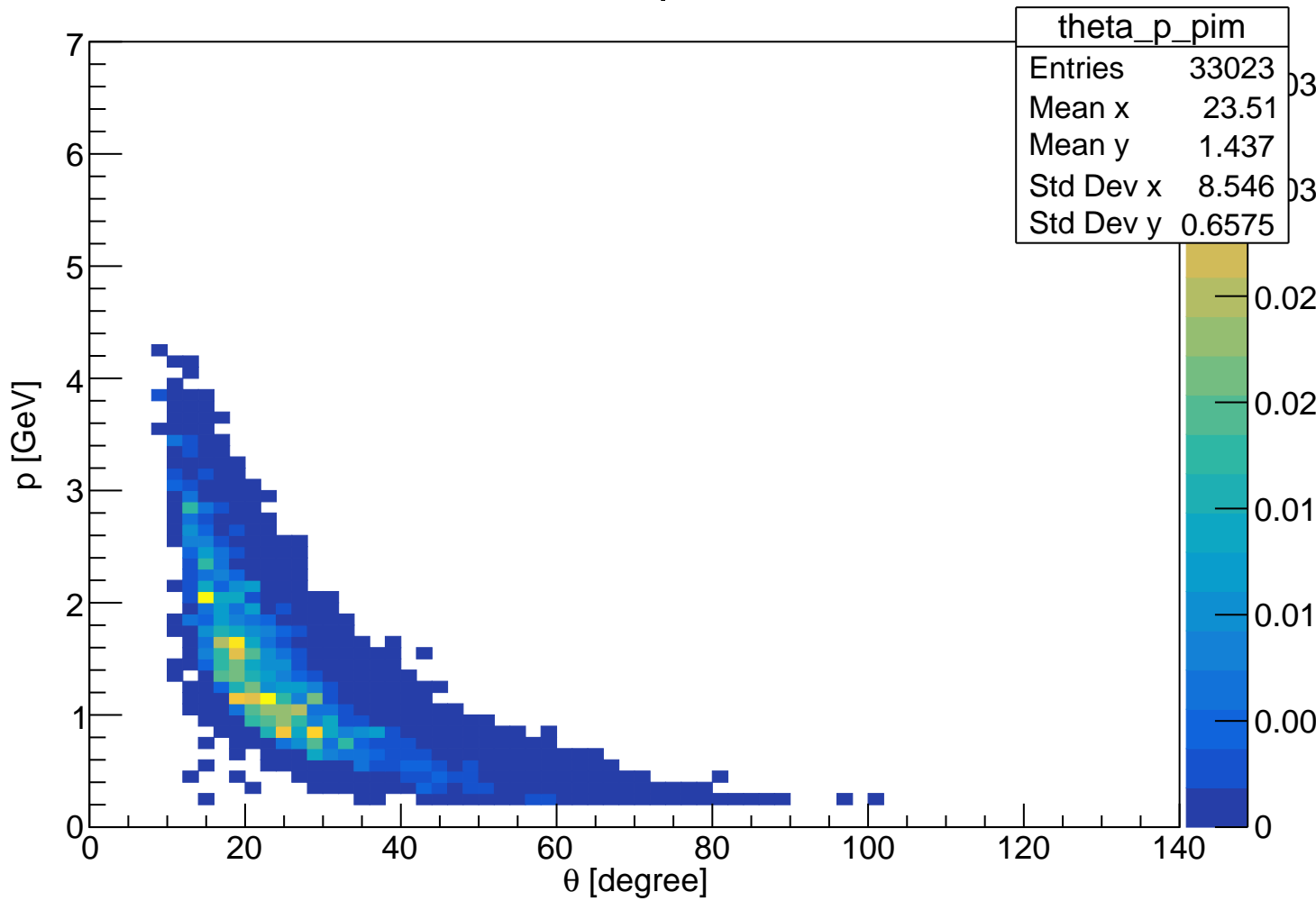
Theta vs p for proton



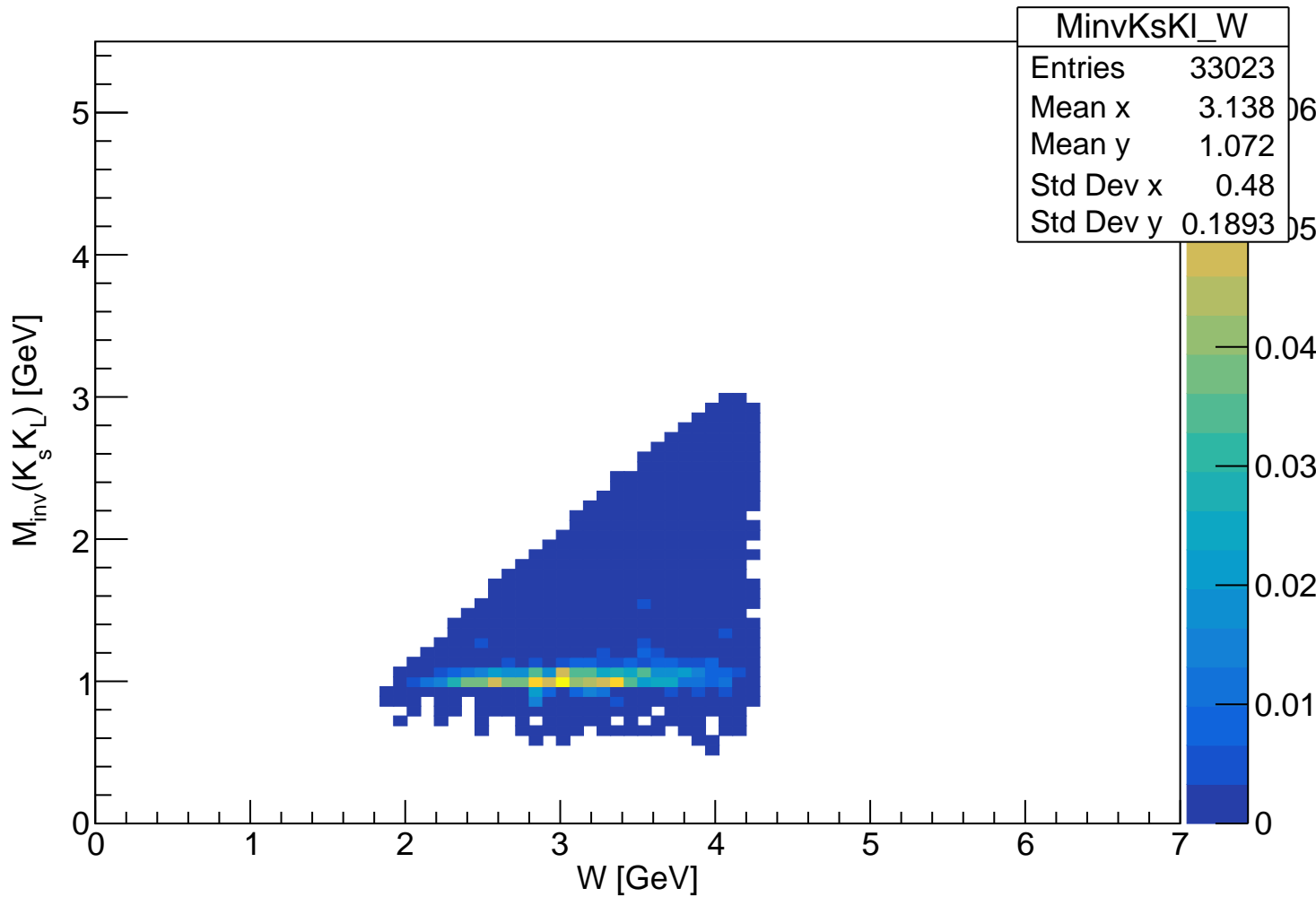
Theta vs p for π^+



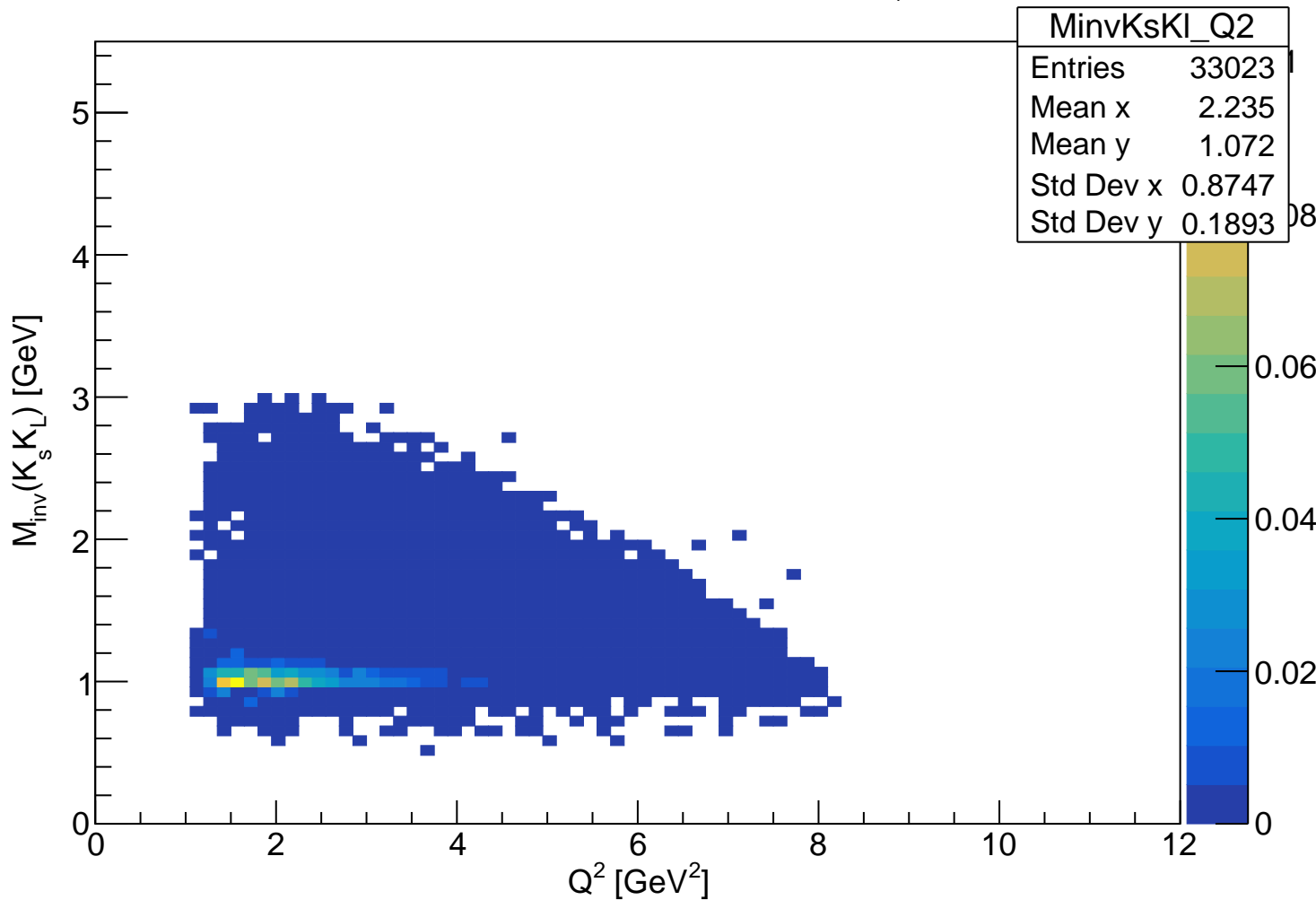
Theta vs p for π^-



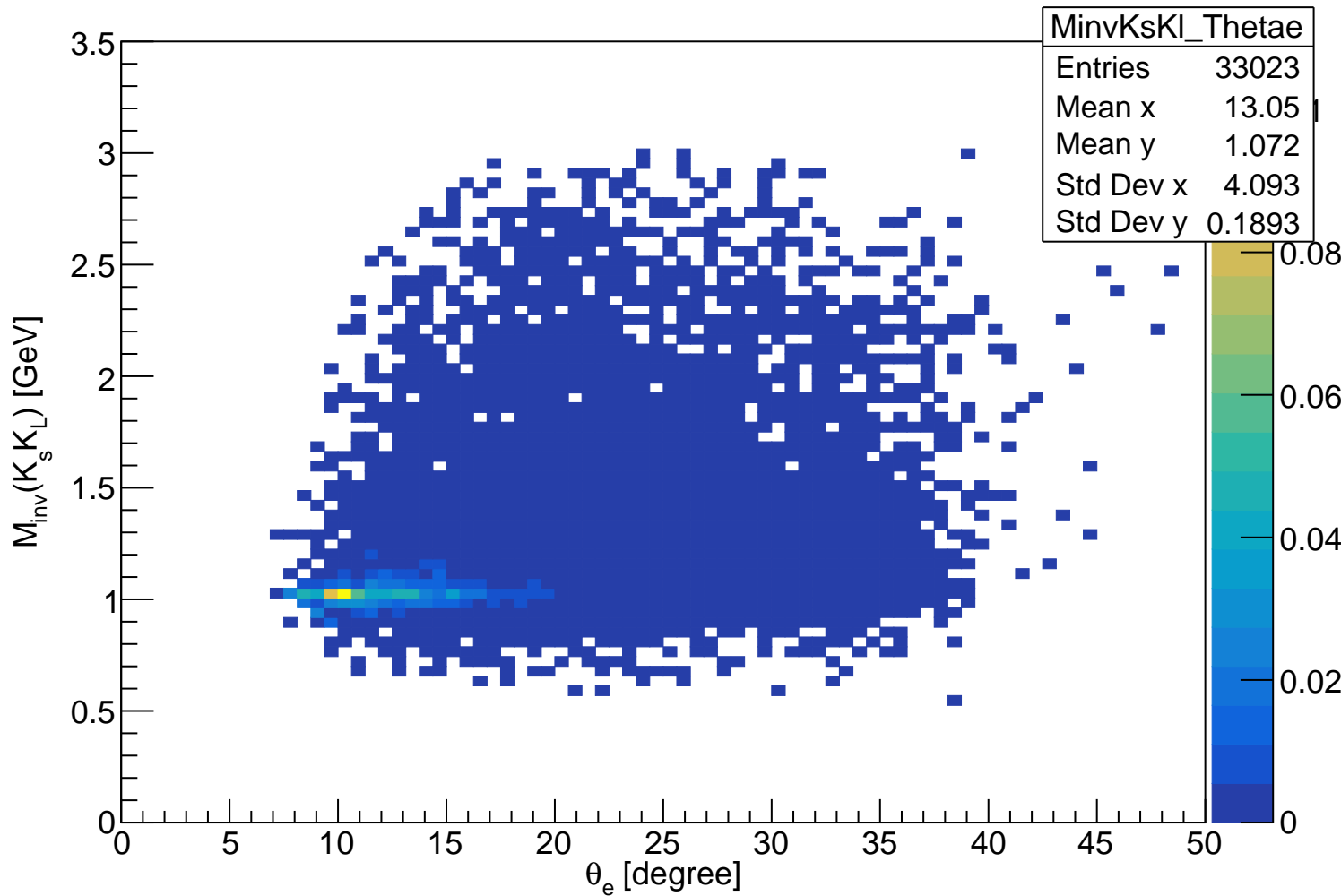
Invariant Mass Ks KI vs W



Invariant Mass Ks Kl vs Q^2



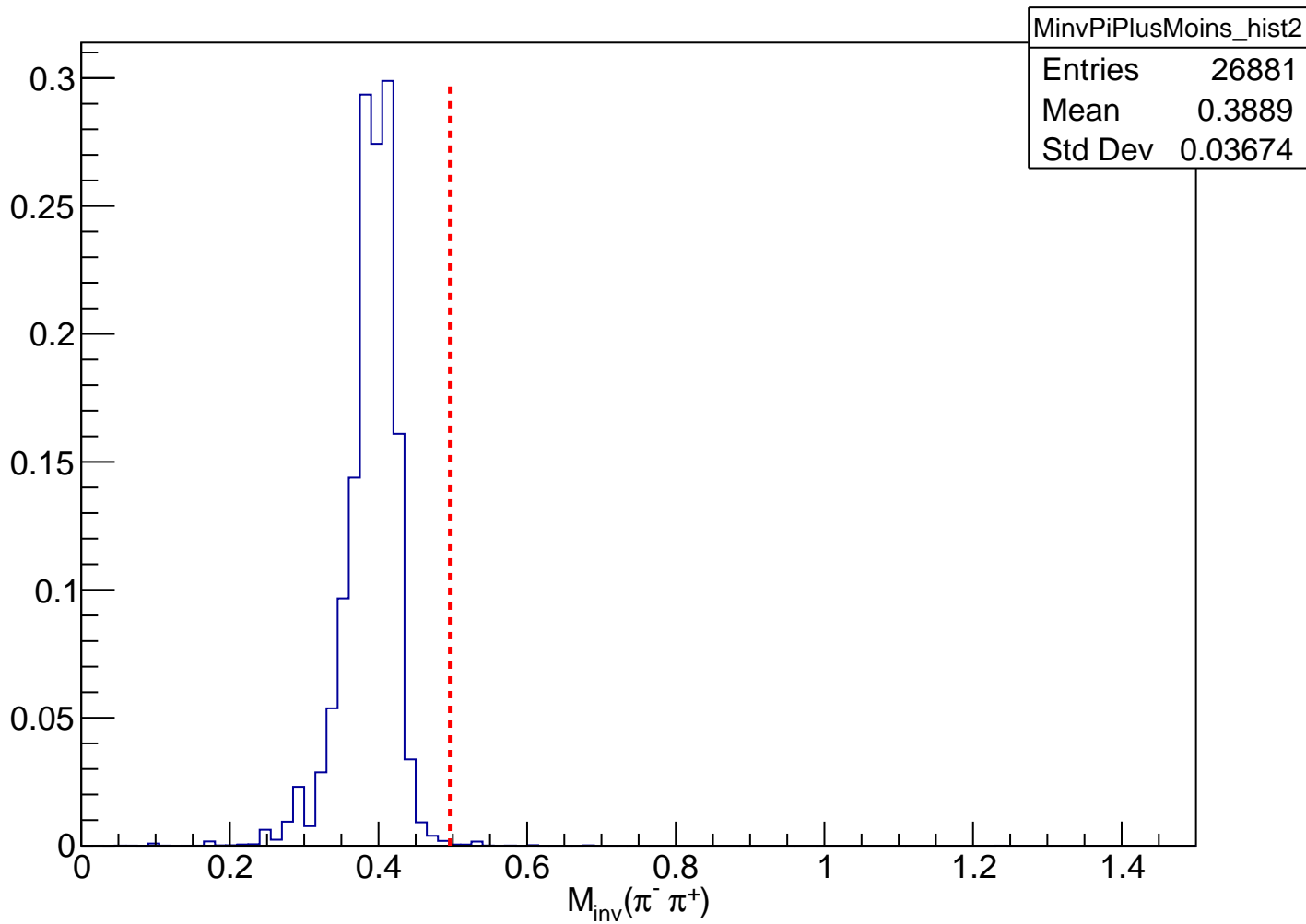
Invariant Mass Ks KI vs Theta electron



Summary of cuts for the next plots:

- Add a cut on missing mass : $0.4 < MM < 0.7 \text{ GeV}$**

Invariant Mass $\pi^- \pi^+$ with cut on MM

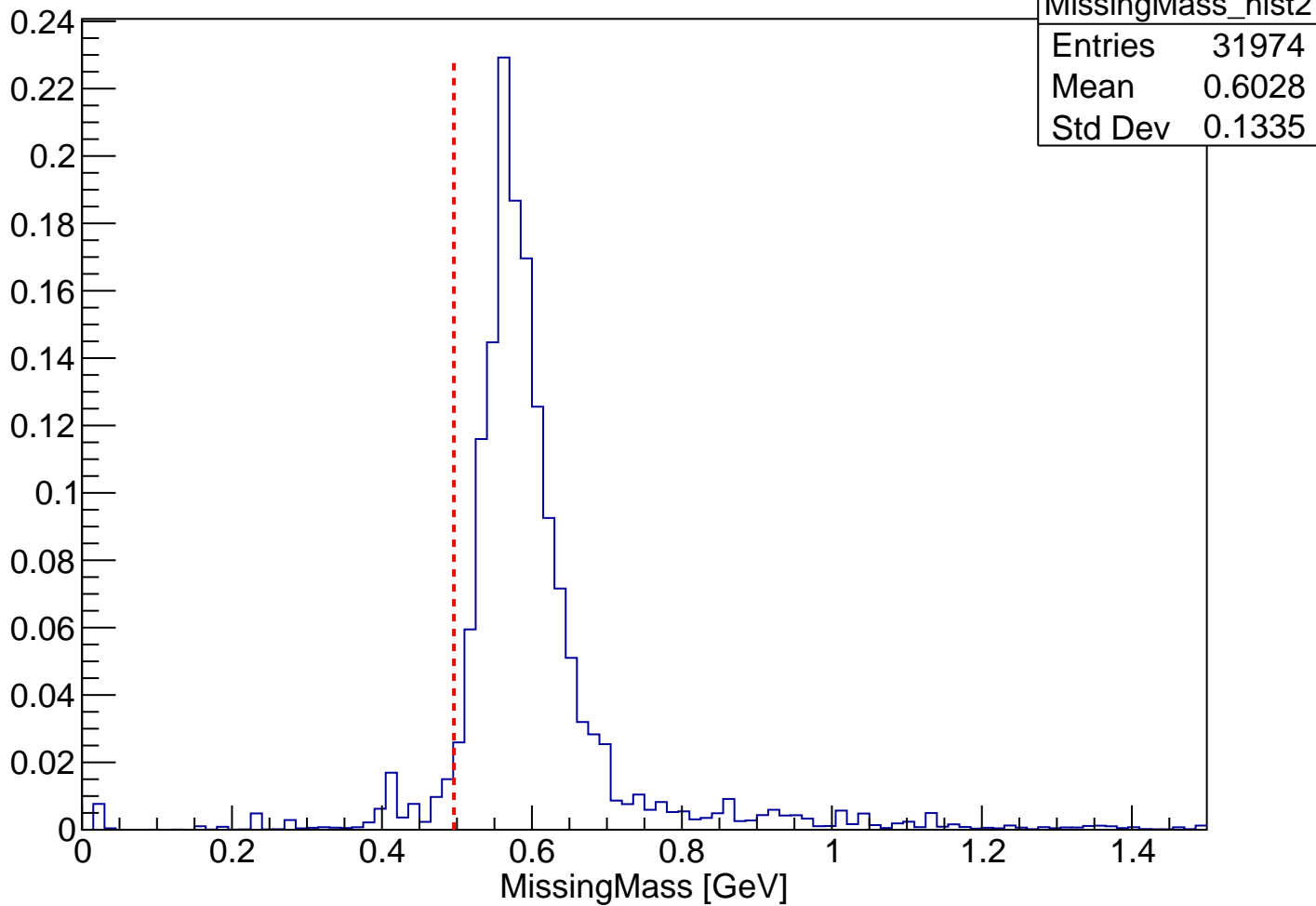


Summary of cuts for the next plots:

- Replace the cut on missing mass by the cut on invariant mass $\pi^+ \pi^-$:

$$0.3 < M_{\text{inv}} < 0.6 \text{ GeV}$$

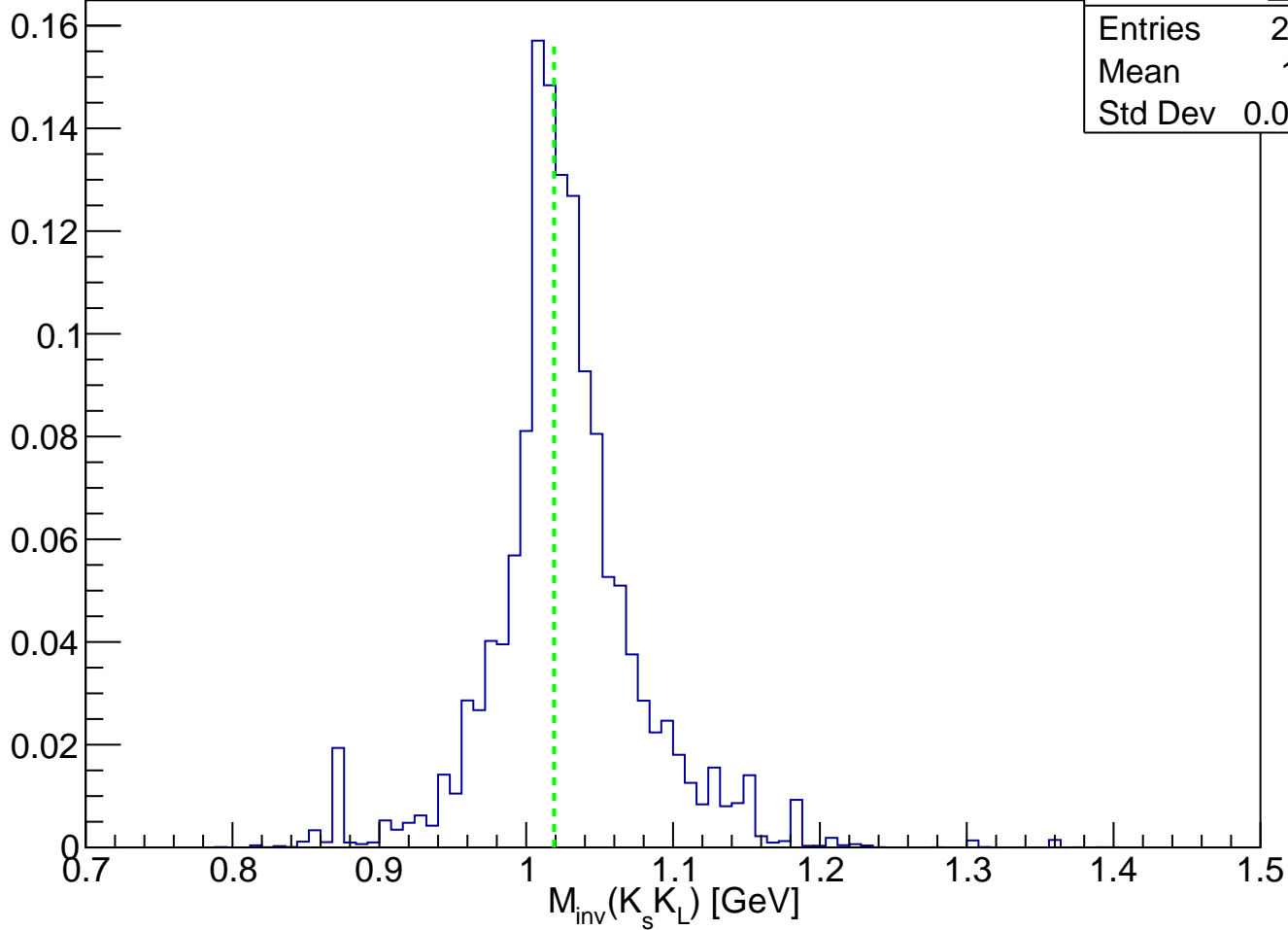
Missing Mass with cut on M_{inv} of $\pi^+\pi^-$



Summary of cuts for the next plots:

- both cut are present (in invariant mass $\pi^+ \pi^-$ and missing mass)**

Invariant Mass $K_s K_L$

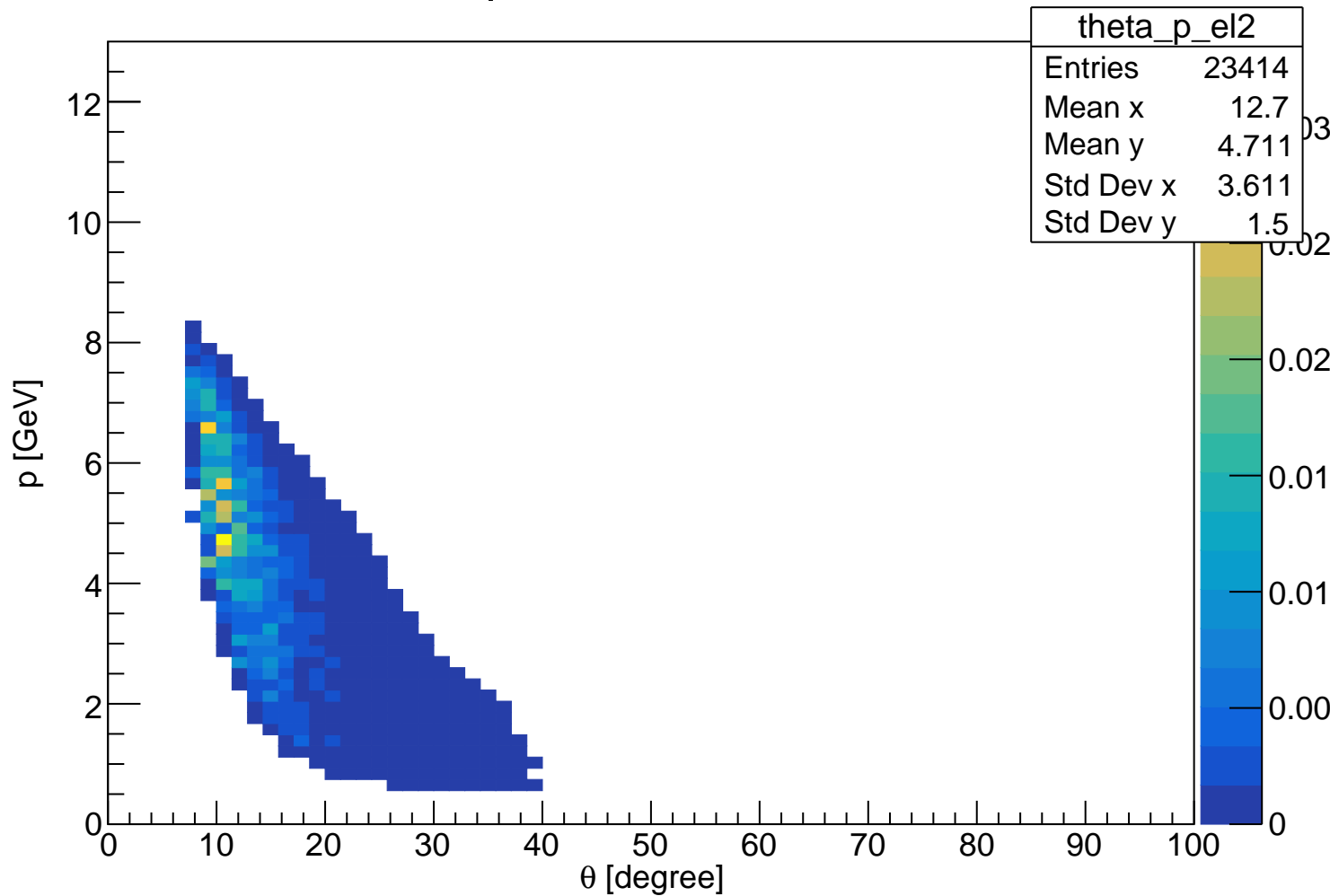


Summary of cuts for the next plots:

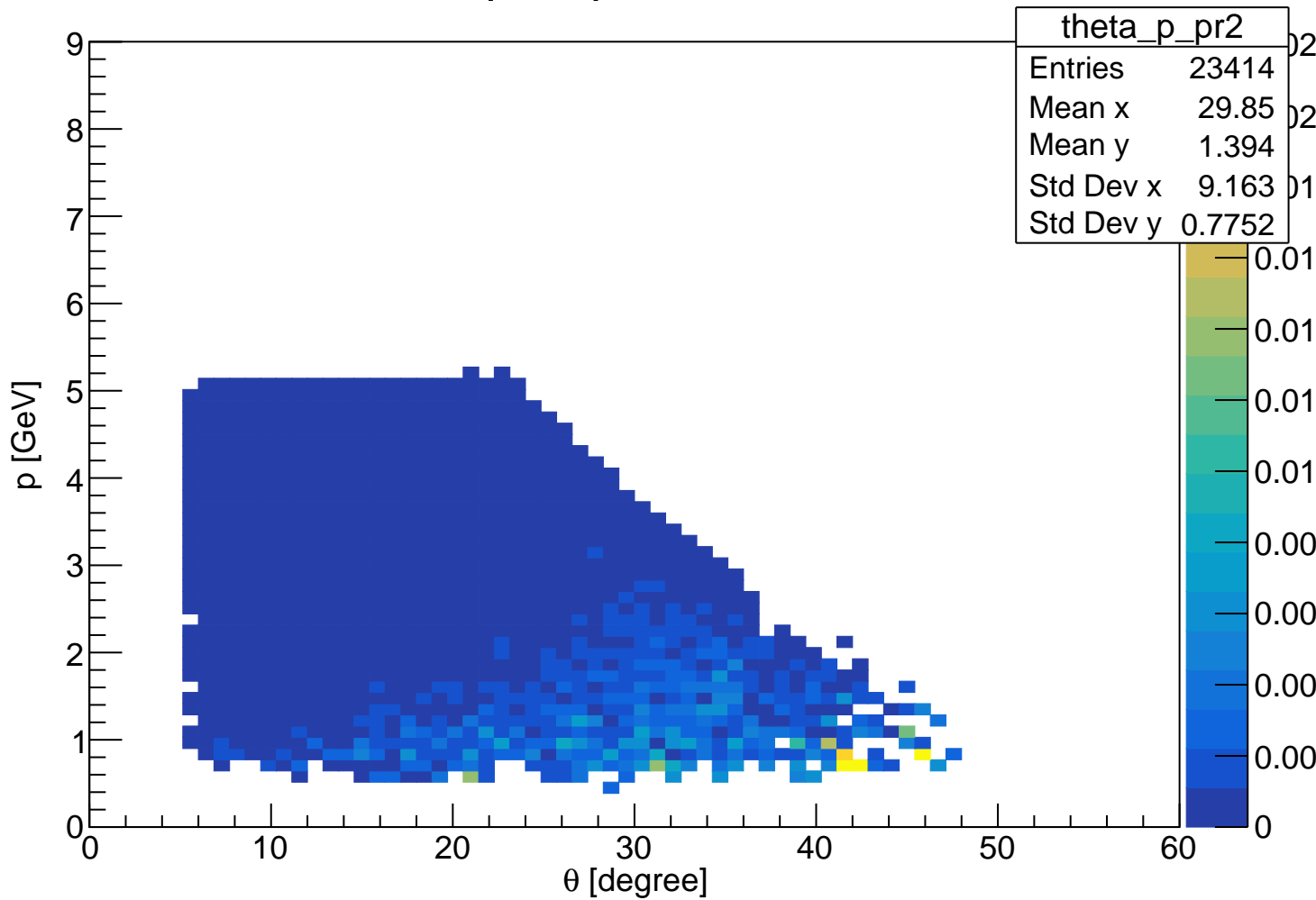
- All cuts (like invariant mass $\pi^+ \pi^-$ and missing mass) + $0.8 < M_{\phi} < 1.2$ GeV

objective : see where the particles reconstructed as a ϕ went

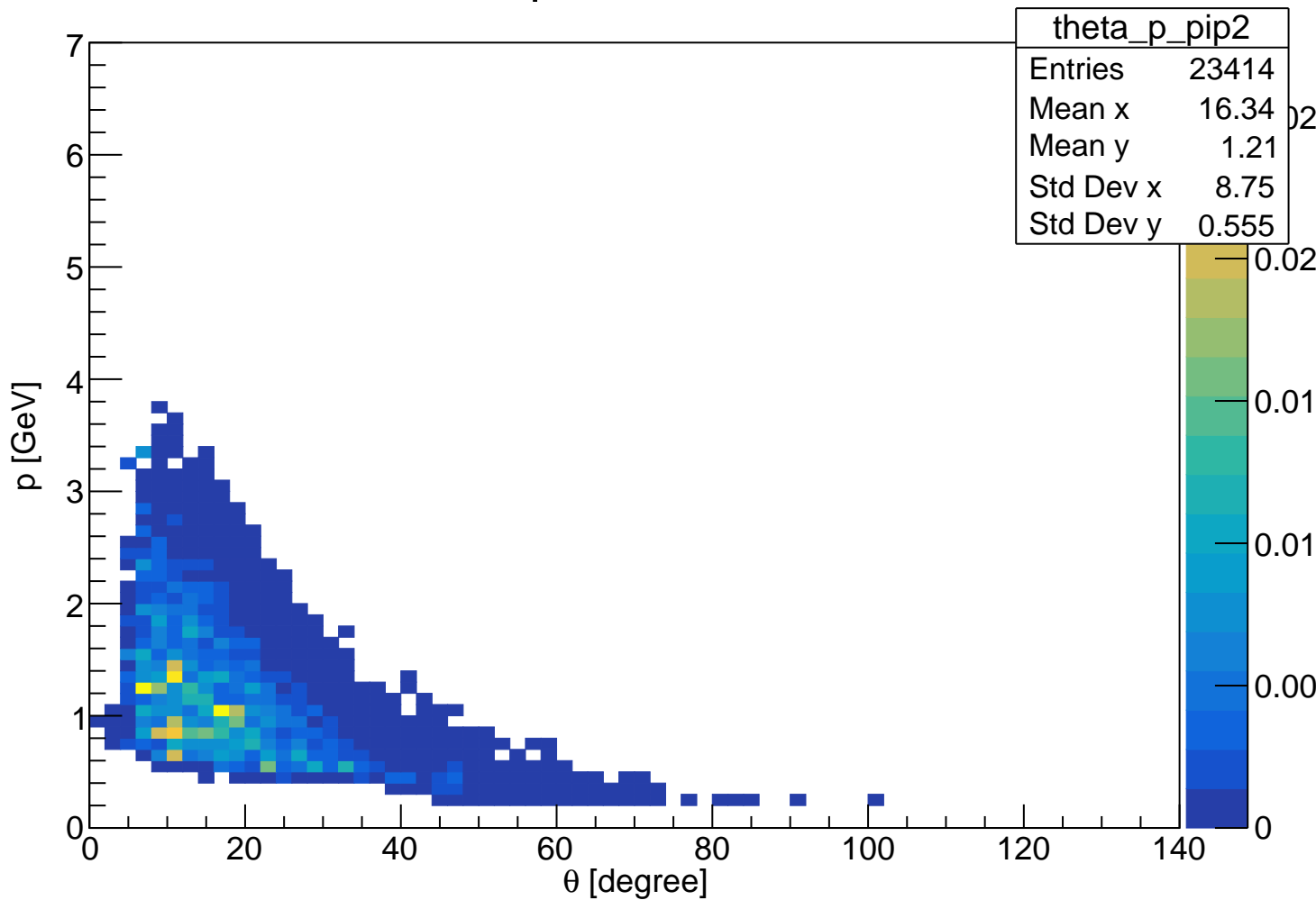
Theta vs p for electron with all cuts



Theta vs p for proton with all cuts



Theta vs p for π^+ with all cuts



Theta vs p for π^- with all cuts

