



Первые результаты симуляций в среде Spdroot

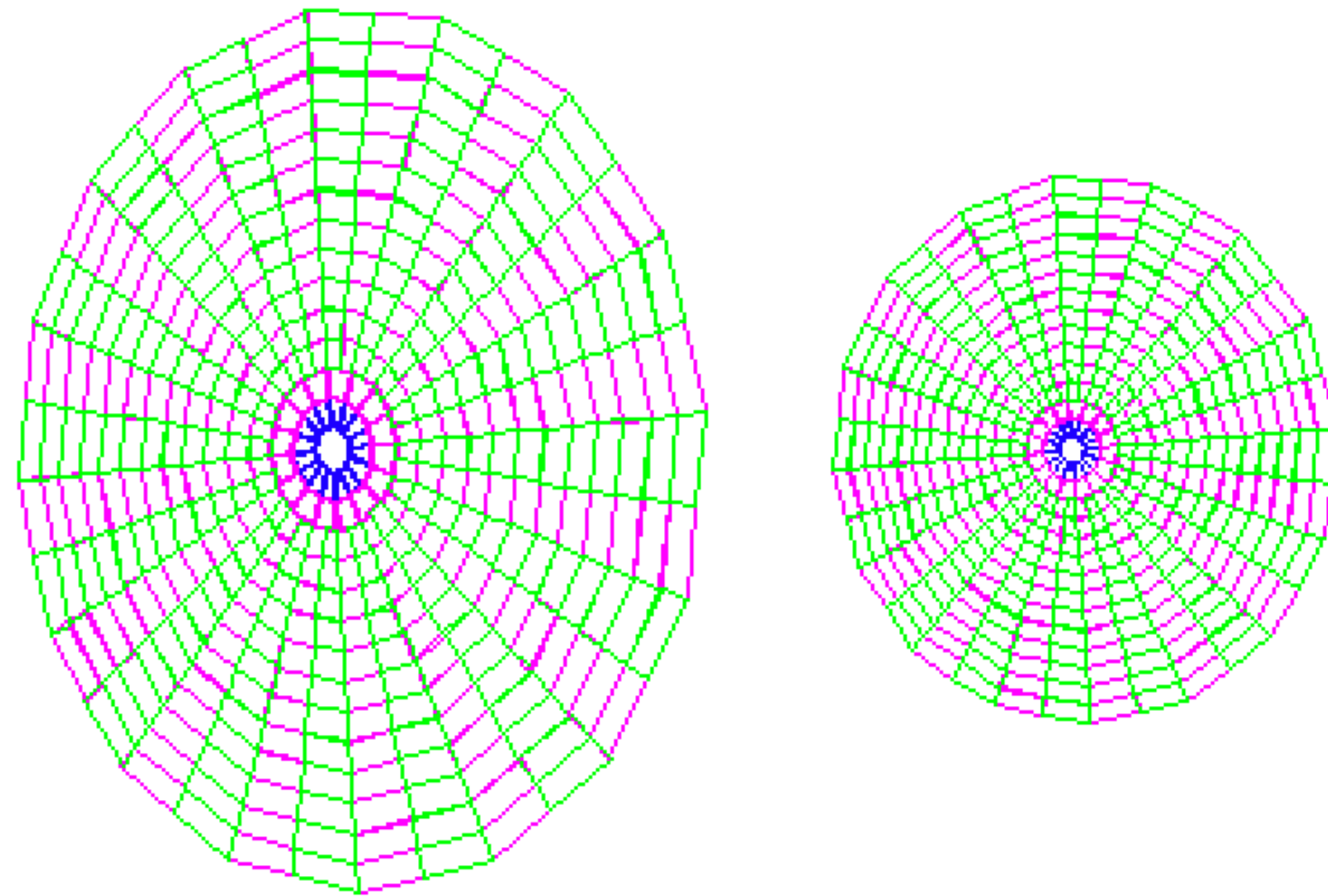
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Солдатов Евгений Юрьевич

06.09.2024
Москва

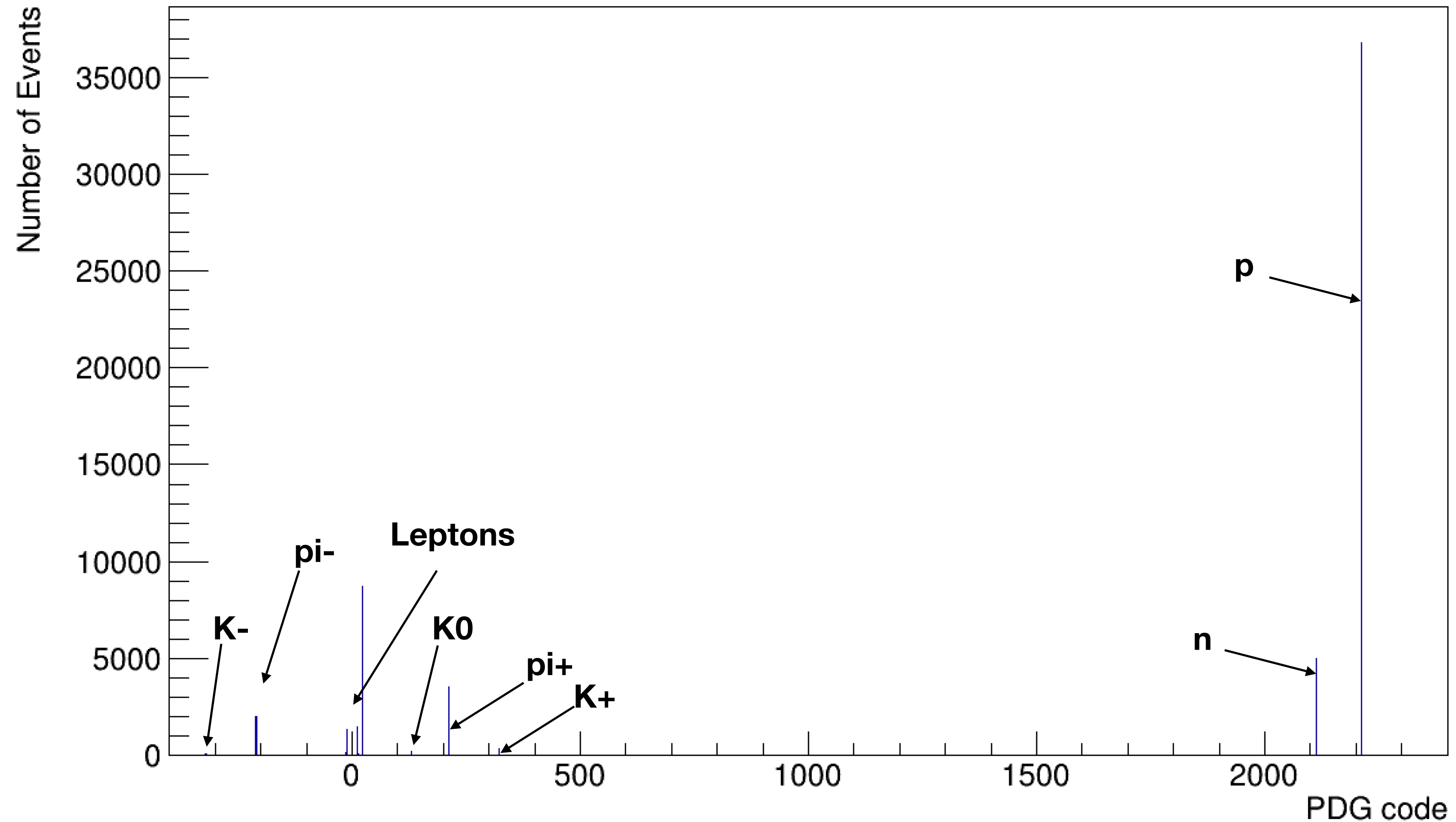
Simulation parameters

- Все симуляции производились с помощью генератора Pythia8
- Во всех симуляциях был использован **только** детектор bbc, остальные детекторы были отключены
- Симуляции проводились по soft QCD (слайды 1-2) и по J/Psi (слайды 3-4)
- По рассматриваемым soft QCD и J/Psi процессам рождались p, n, K⁺⁰, pi⁺⁰, leptons, gamma
- Более подробно про количество рождаемых частиц описано на слайдах 4, 10 (для soft QCD) и 16, 22 (для J/Psi)

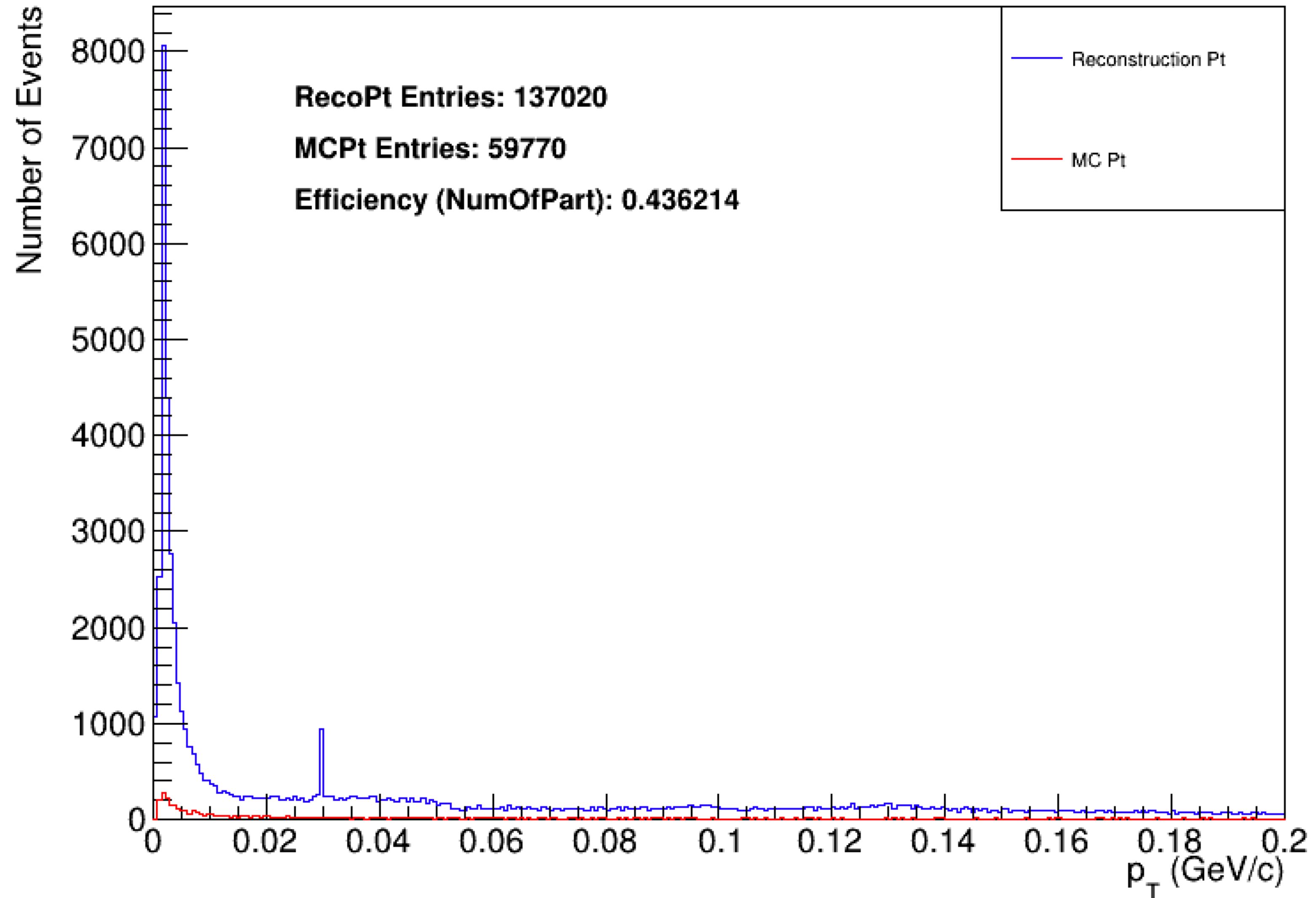
Bbc geometry



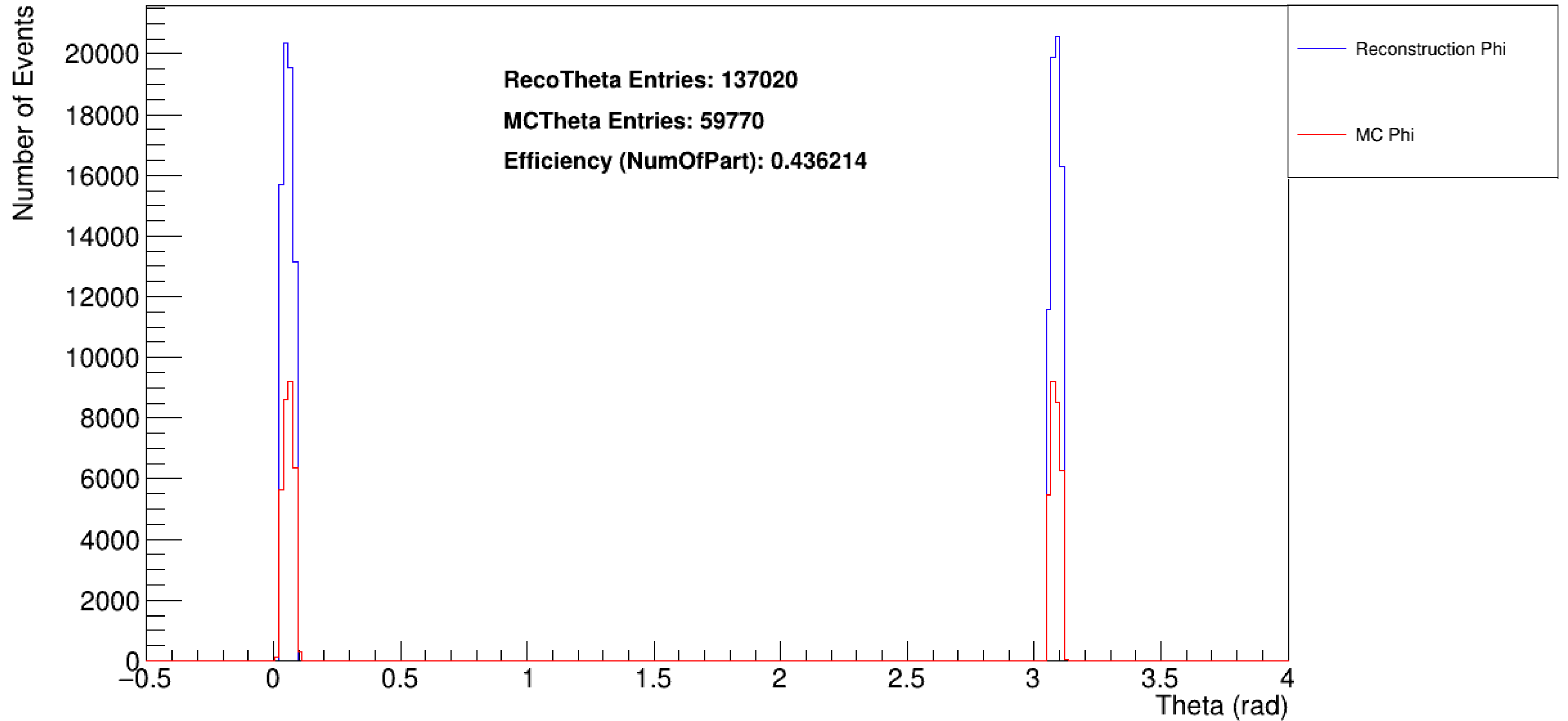
Soft QCD 100k event, Produced particles



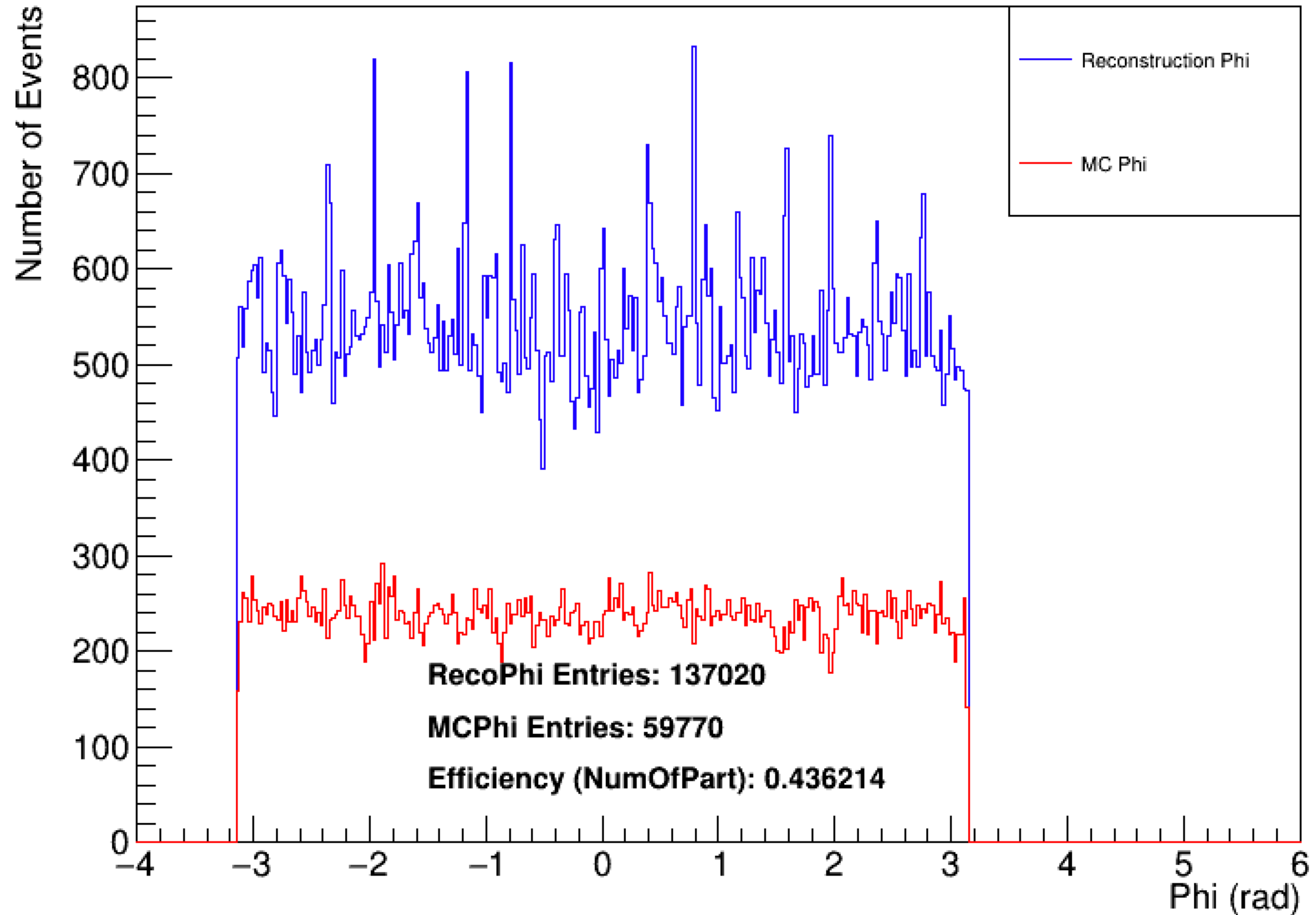
Soft QCD 100k event, Pt



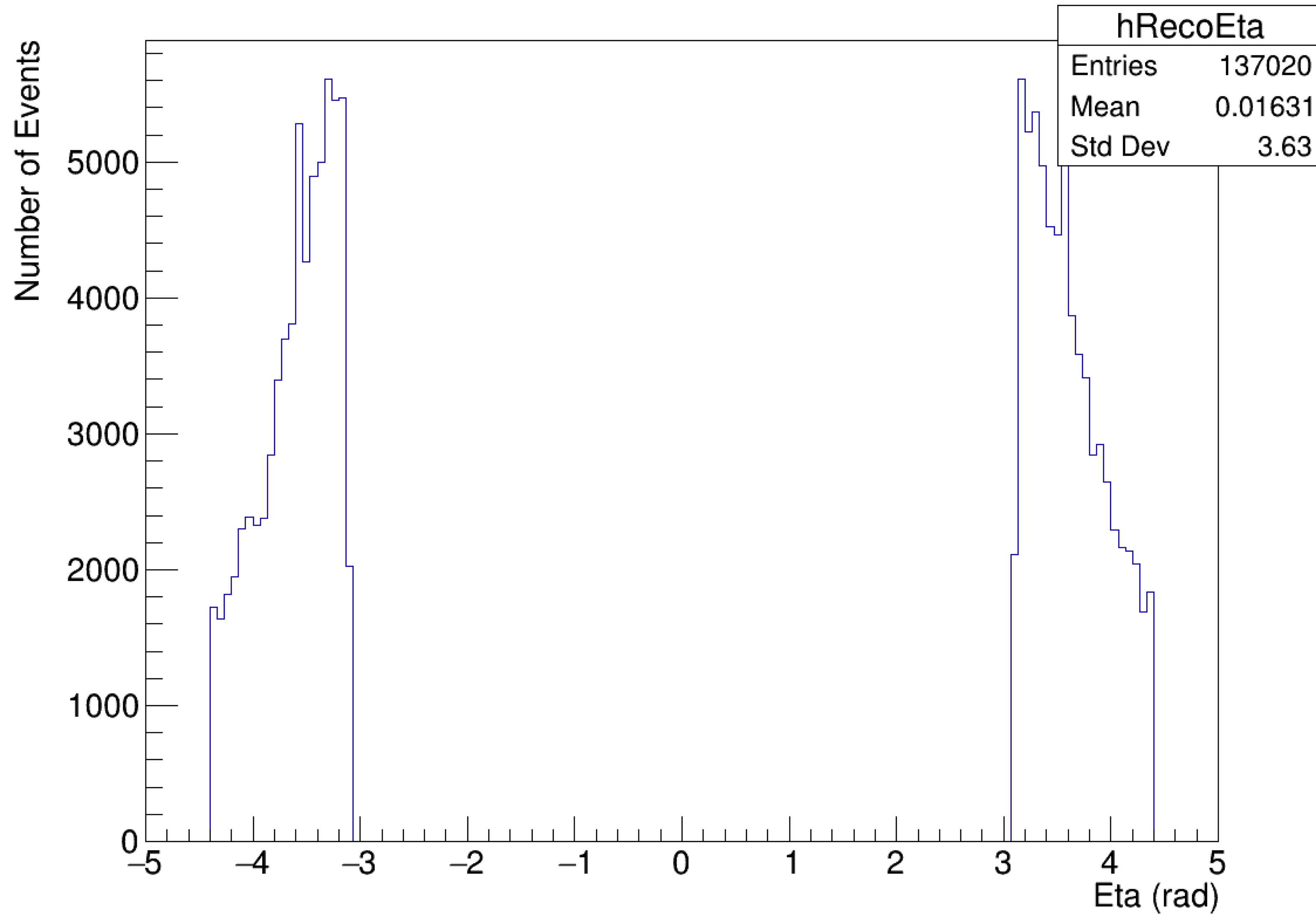
Soft QCD 100k event, Theta



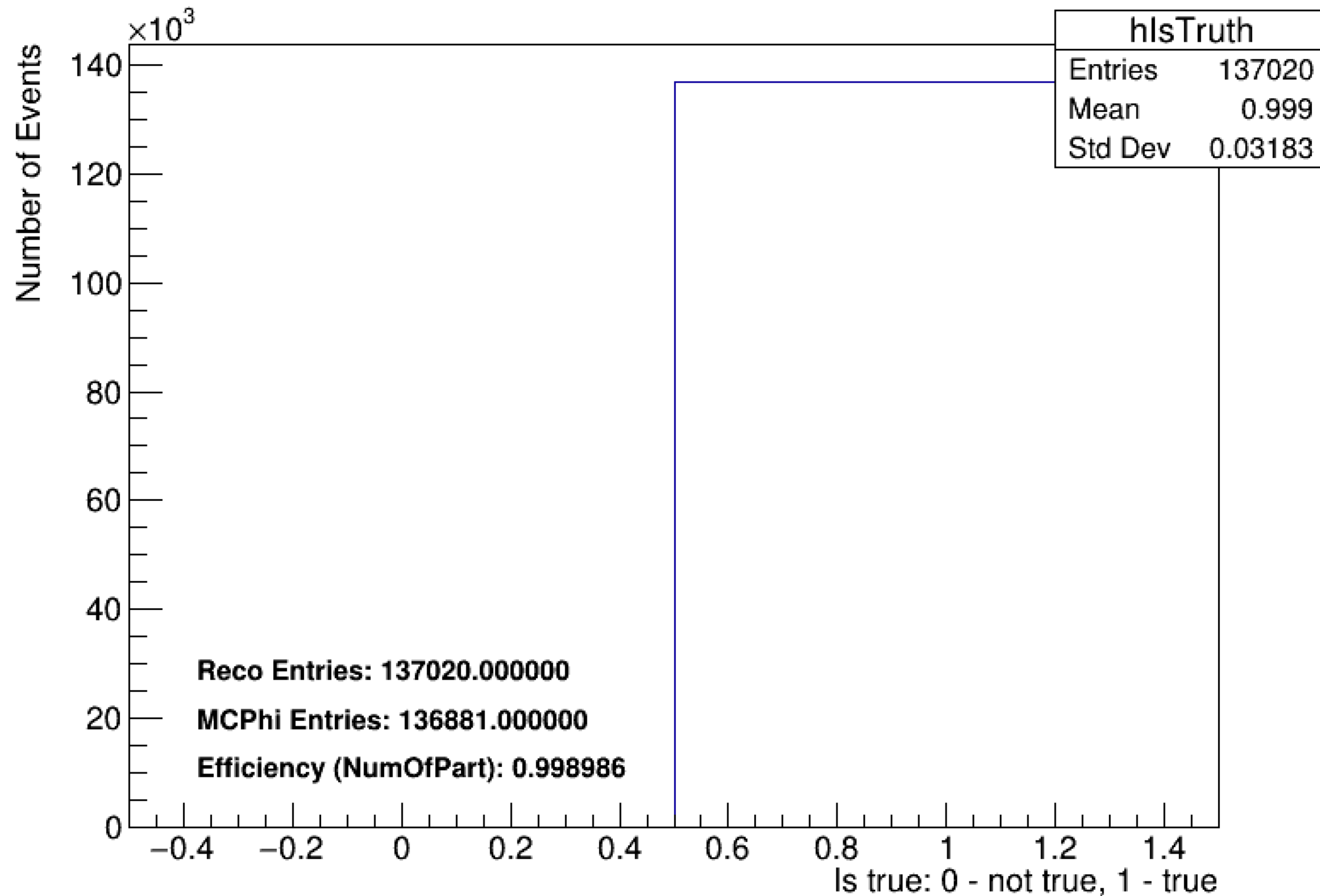
Soft QCD 100k event, Phi



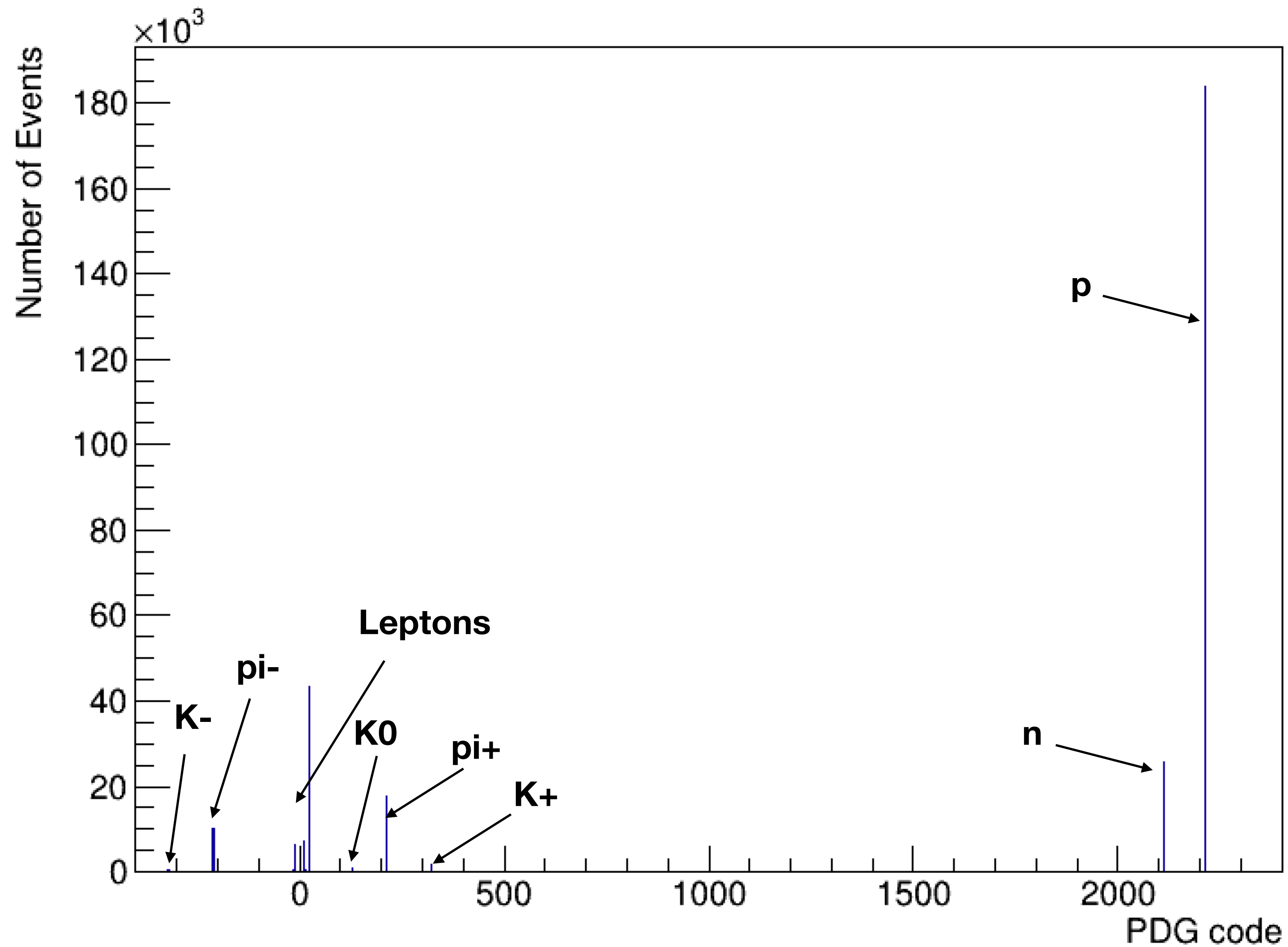
Soft QCD 100k event, Pseudorapidity



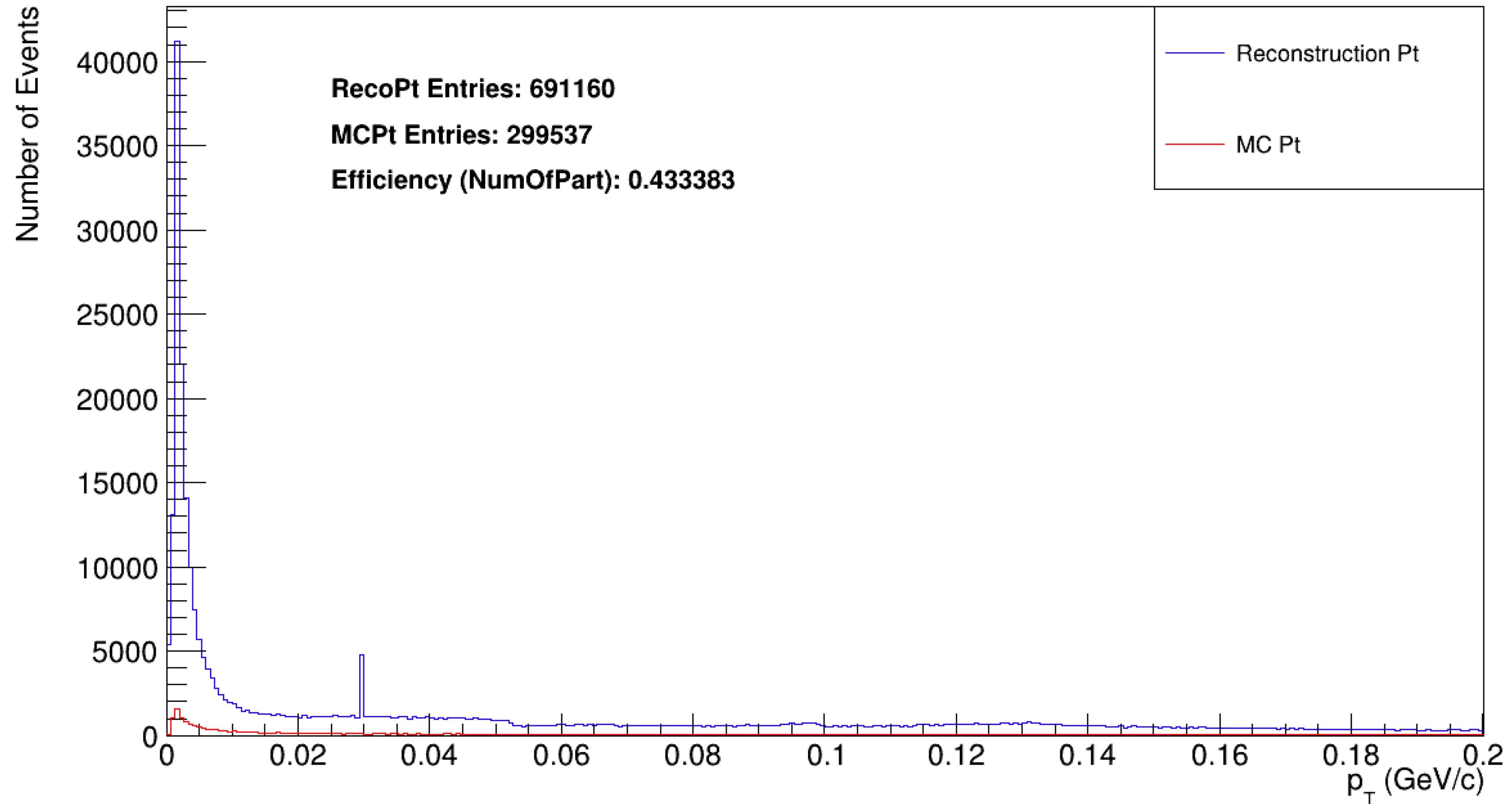
Soft QCD 100k event, Number of Particles



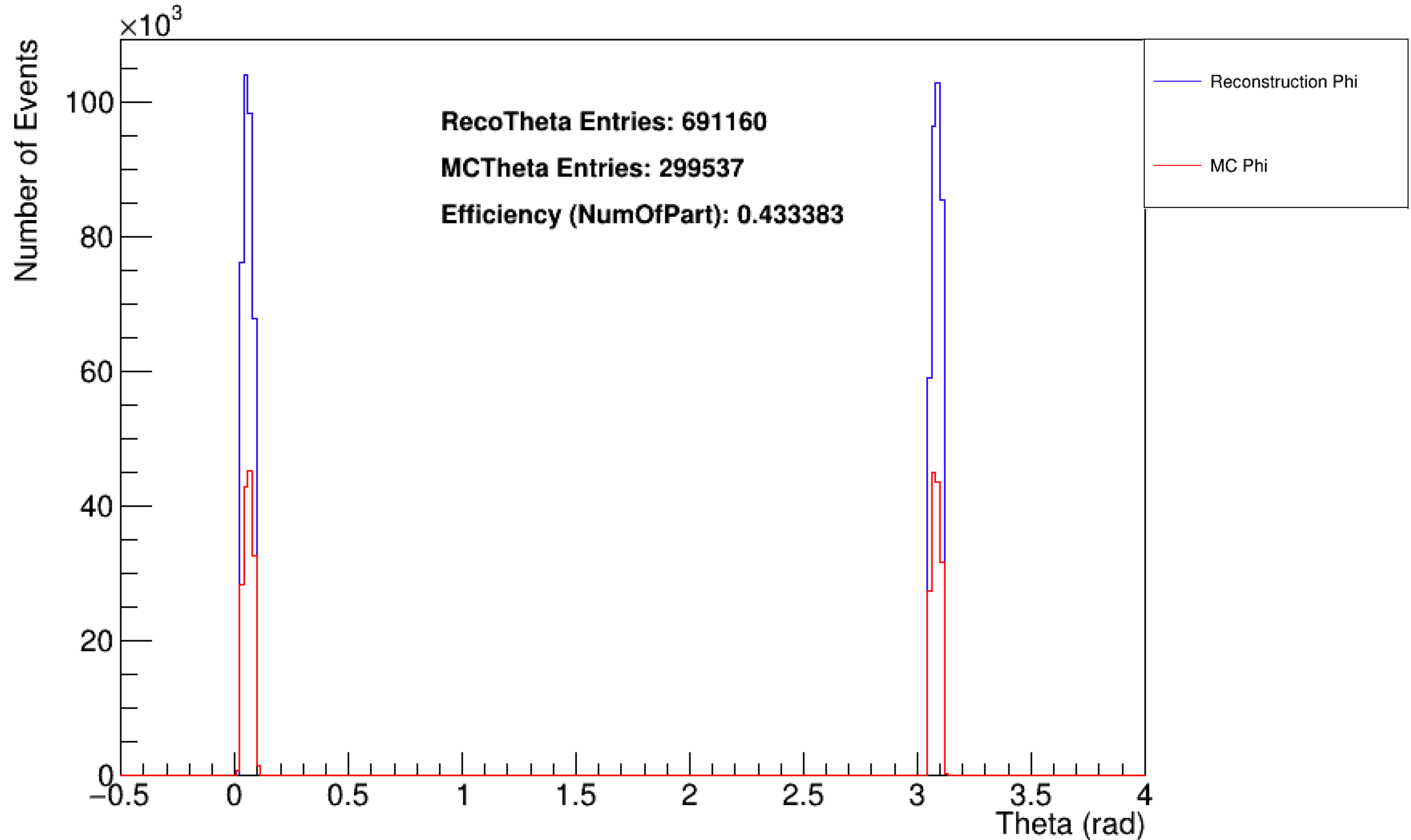
Soft QCD 500k event, Produced particles



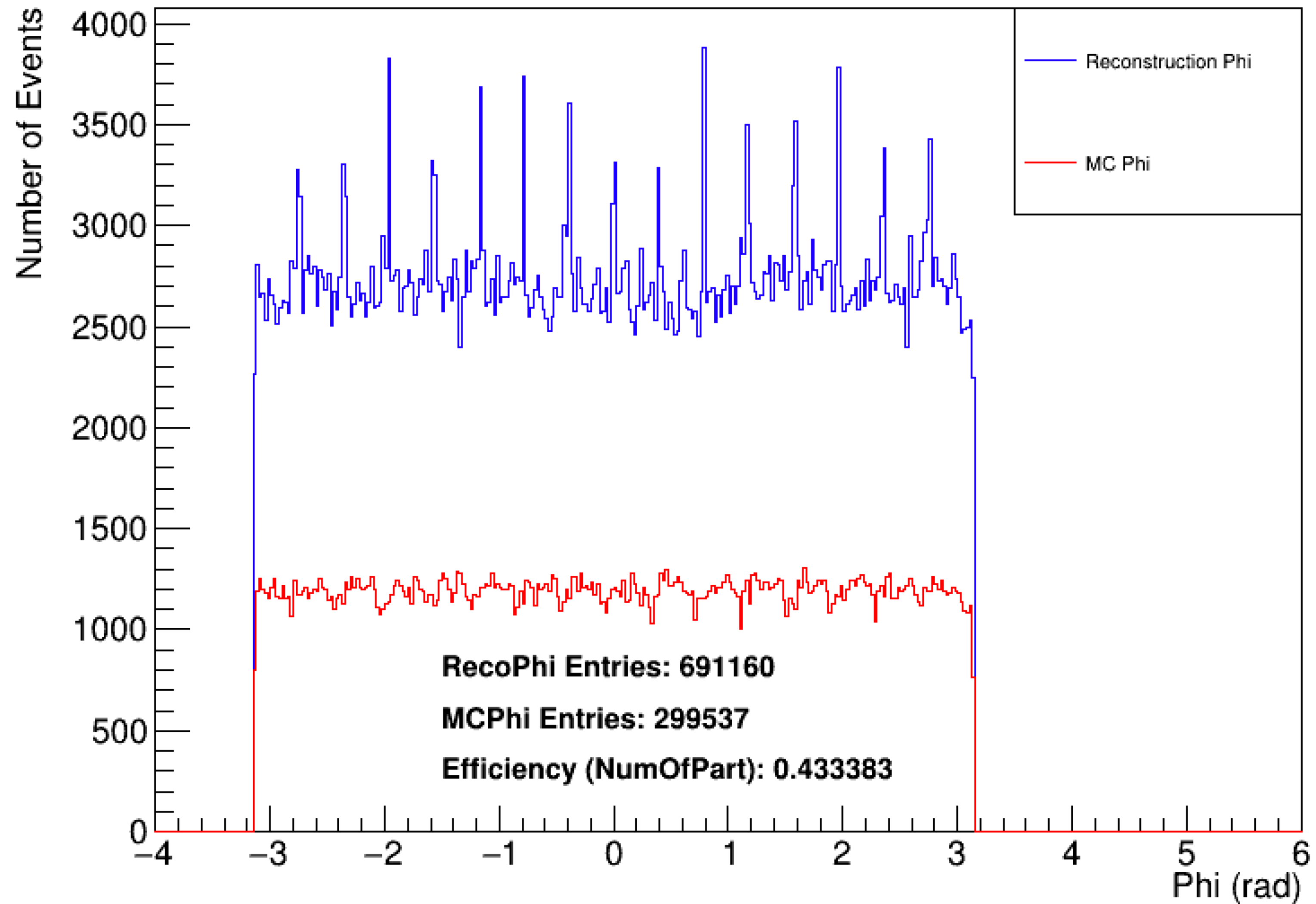
Soft QCD 500k event, Pt



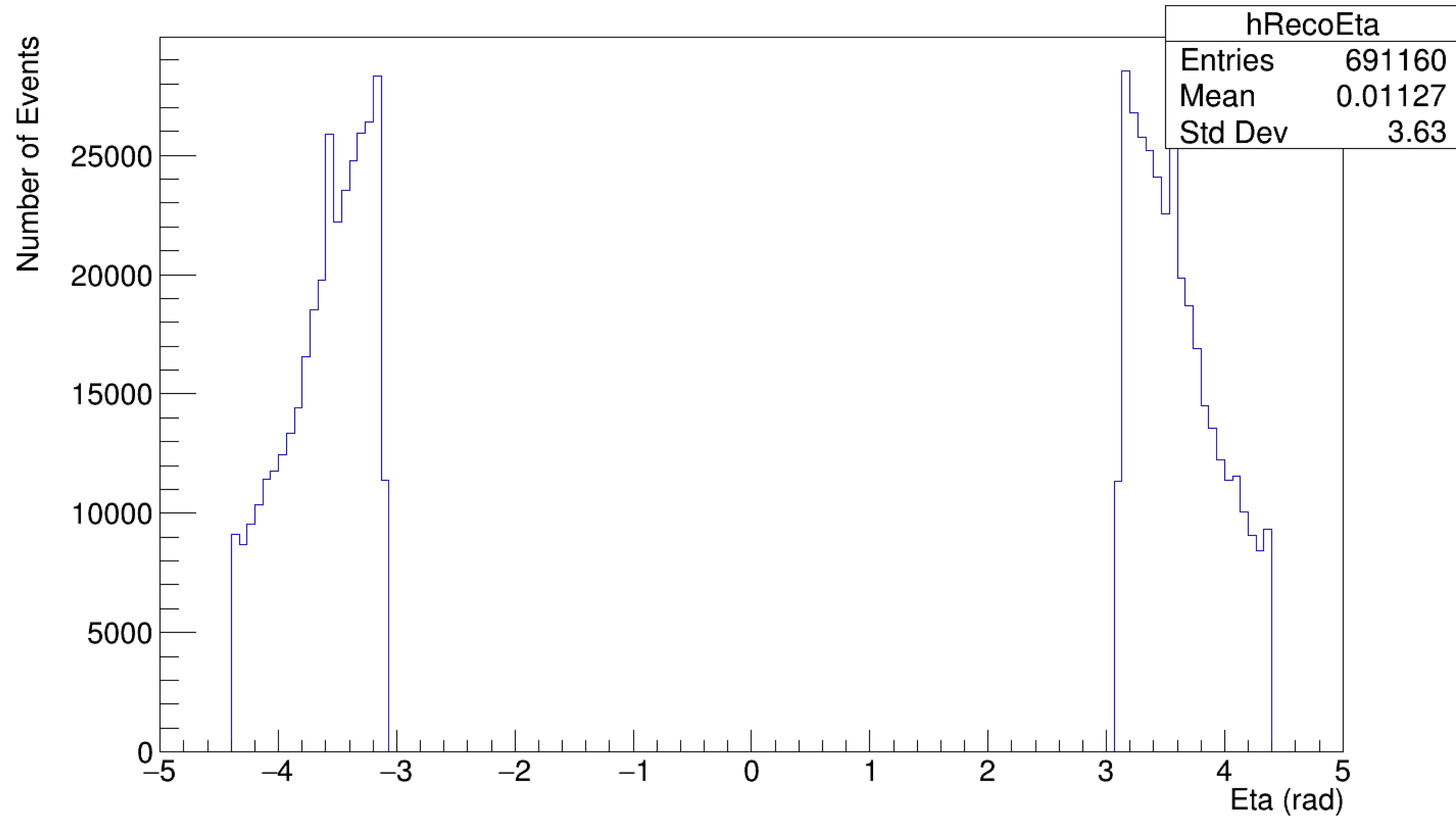
Soft QCD 500k event, Theta



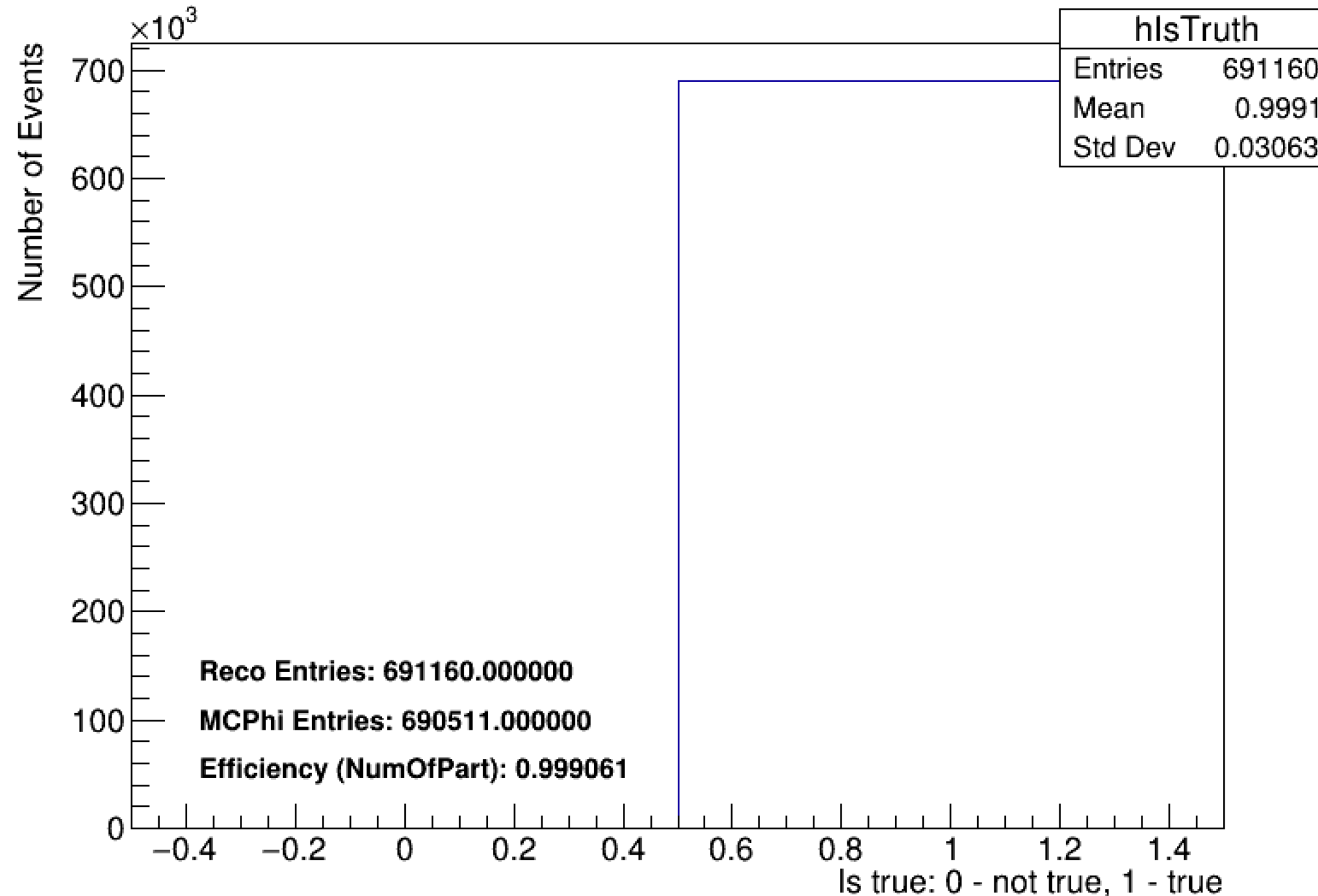
Soft QCD 500k event, Phi



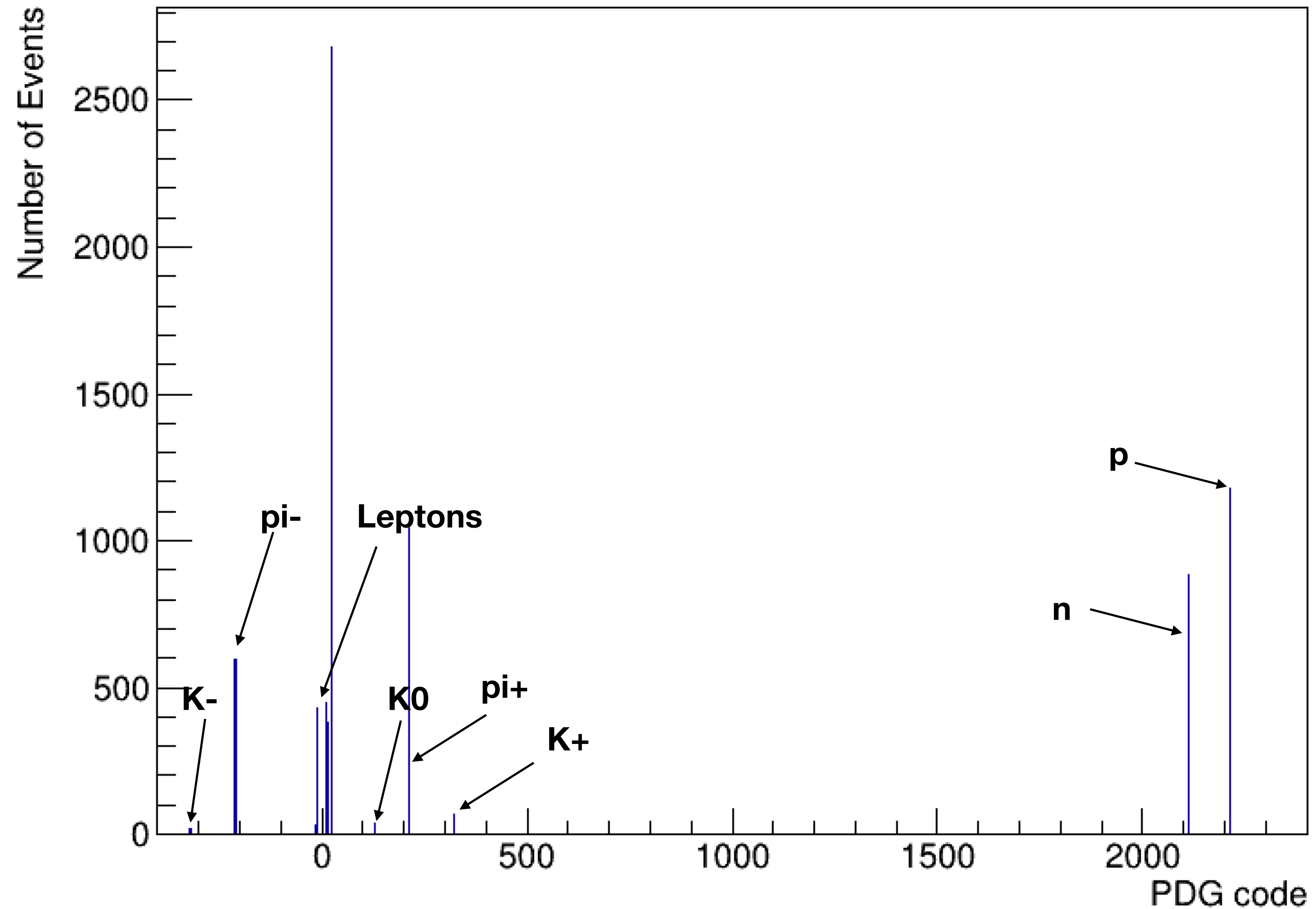
Soft QCD 500k event, Pseudorapidity



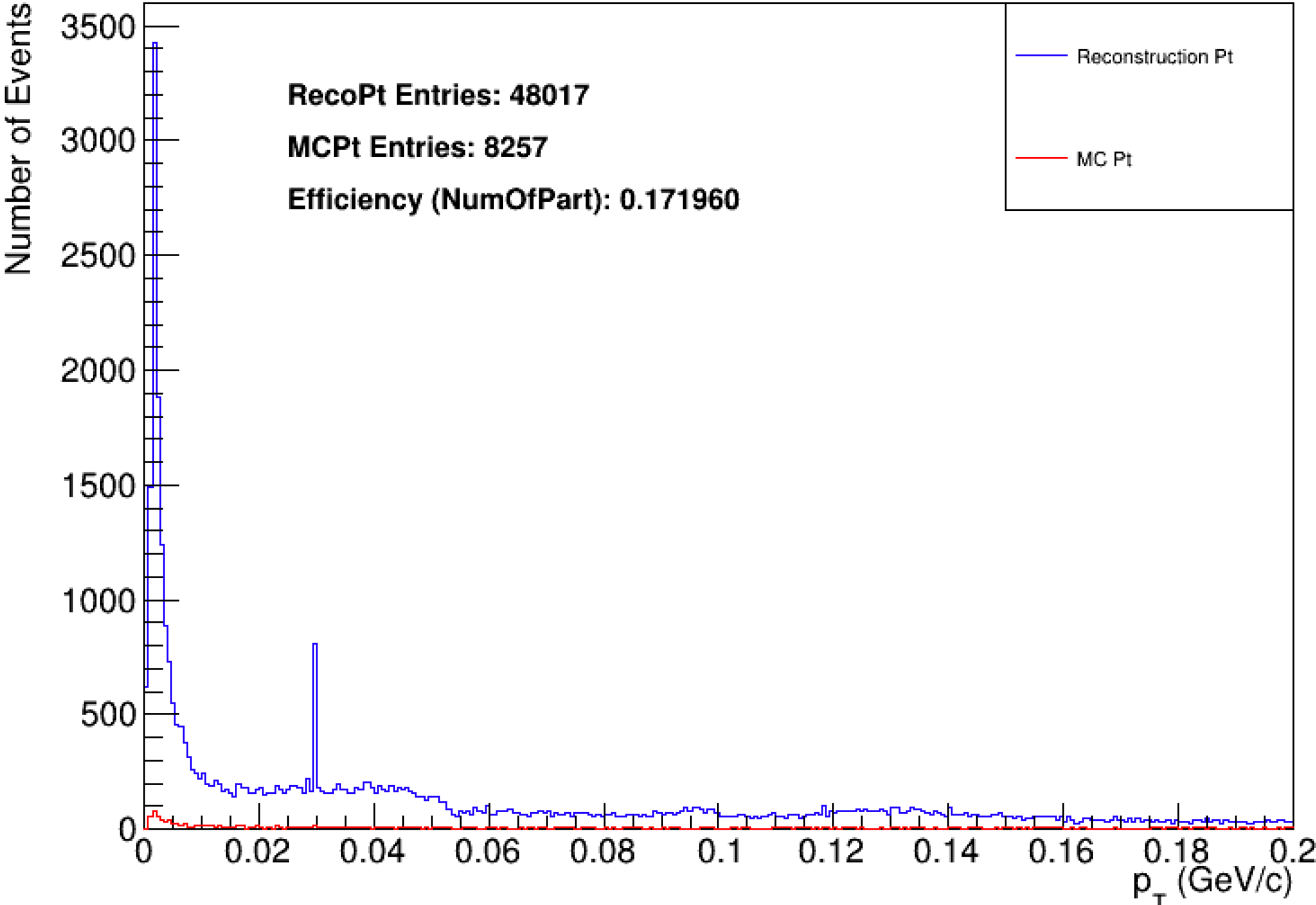
Soft QCD 500k event, Number of Particles



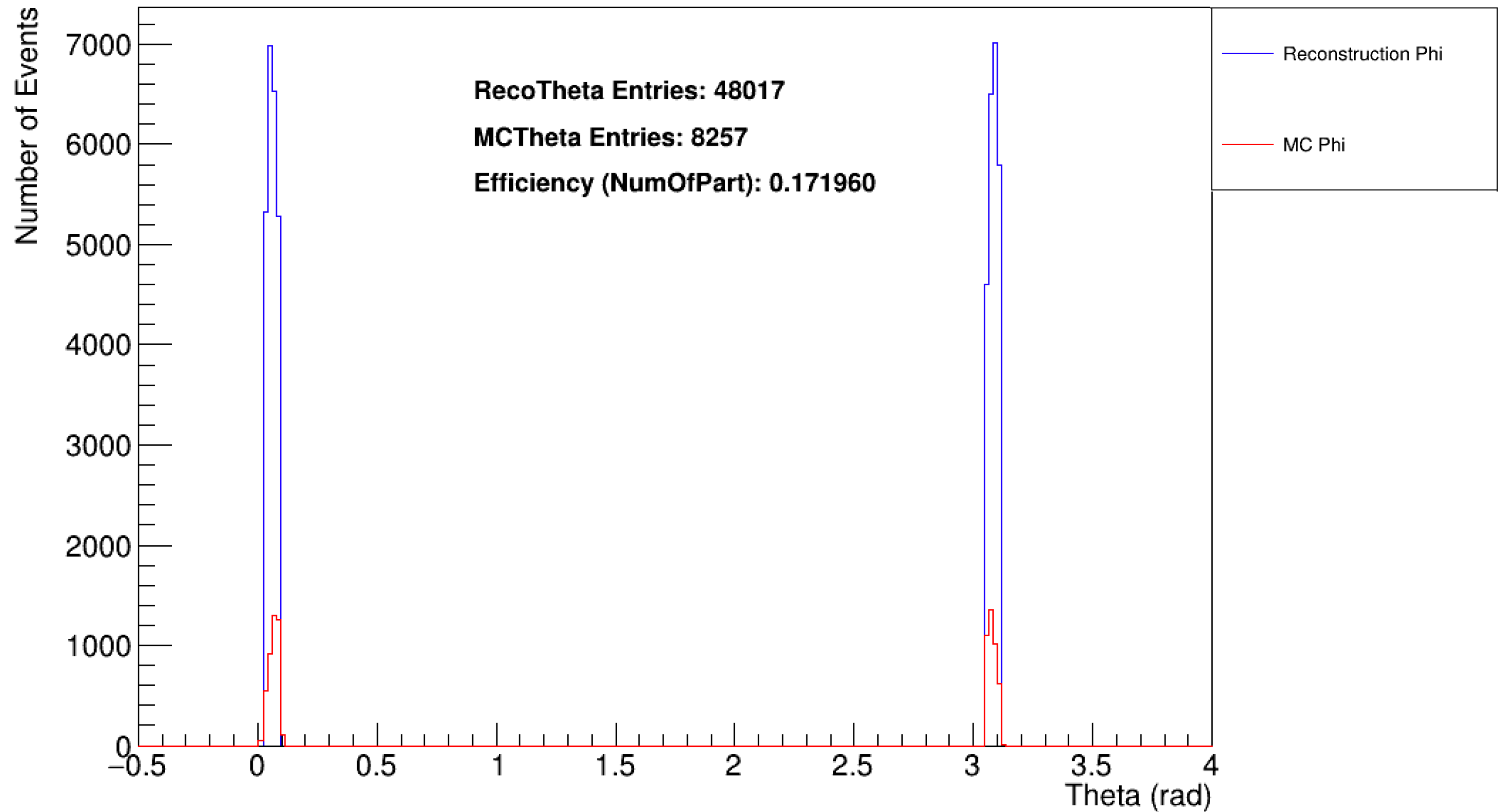
J/Psi 100k event, Produced particles



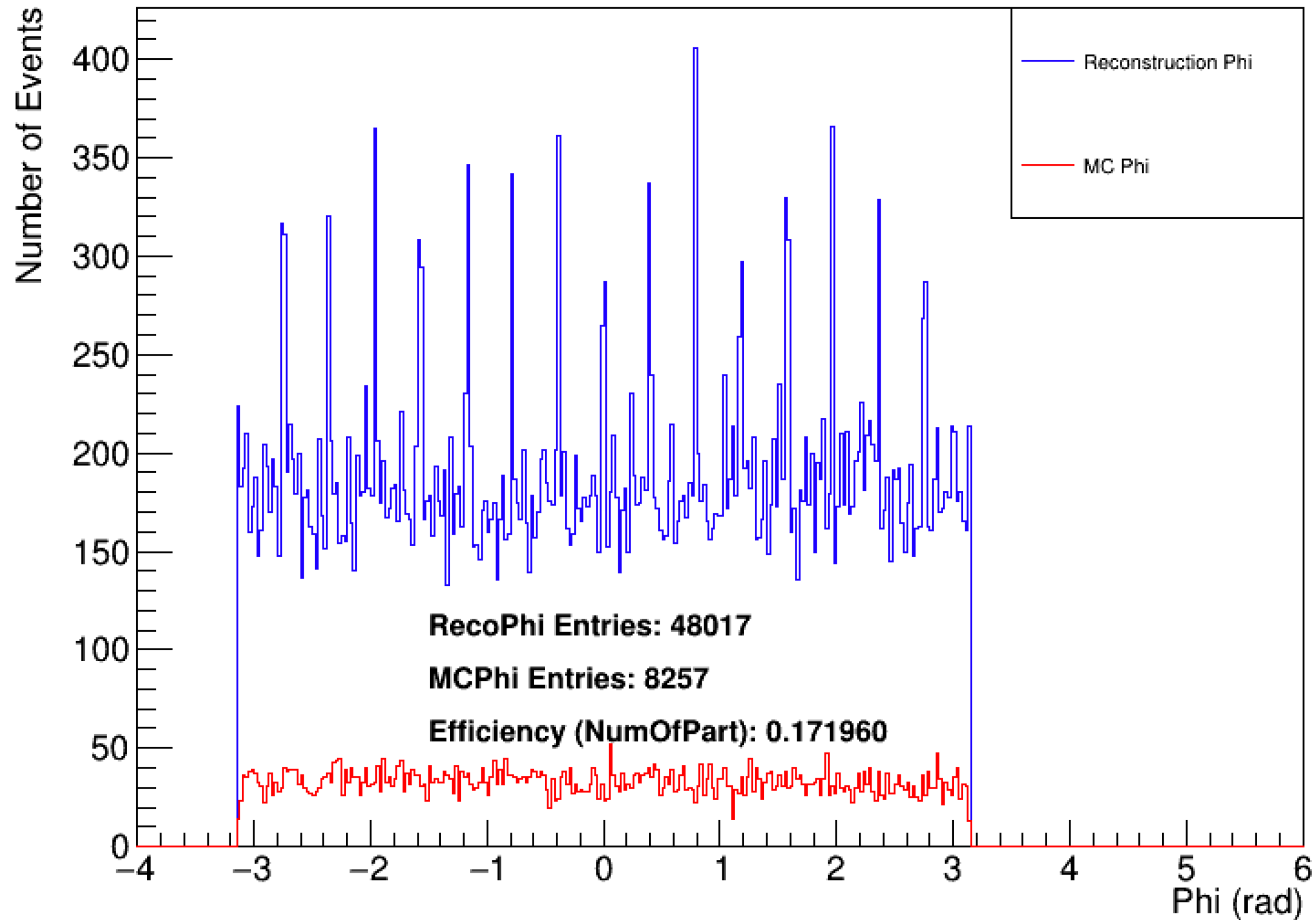
J/Psi 100k event, Pt



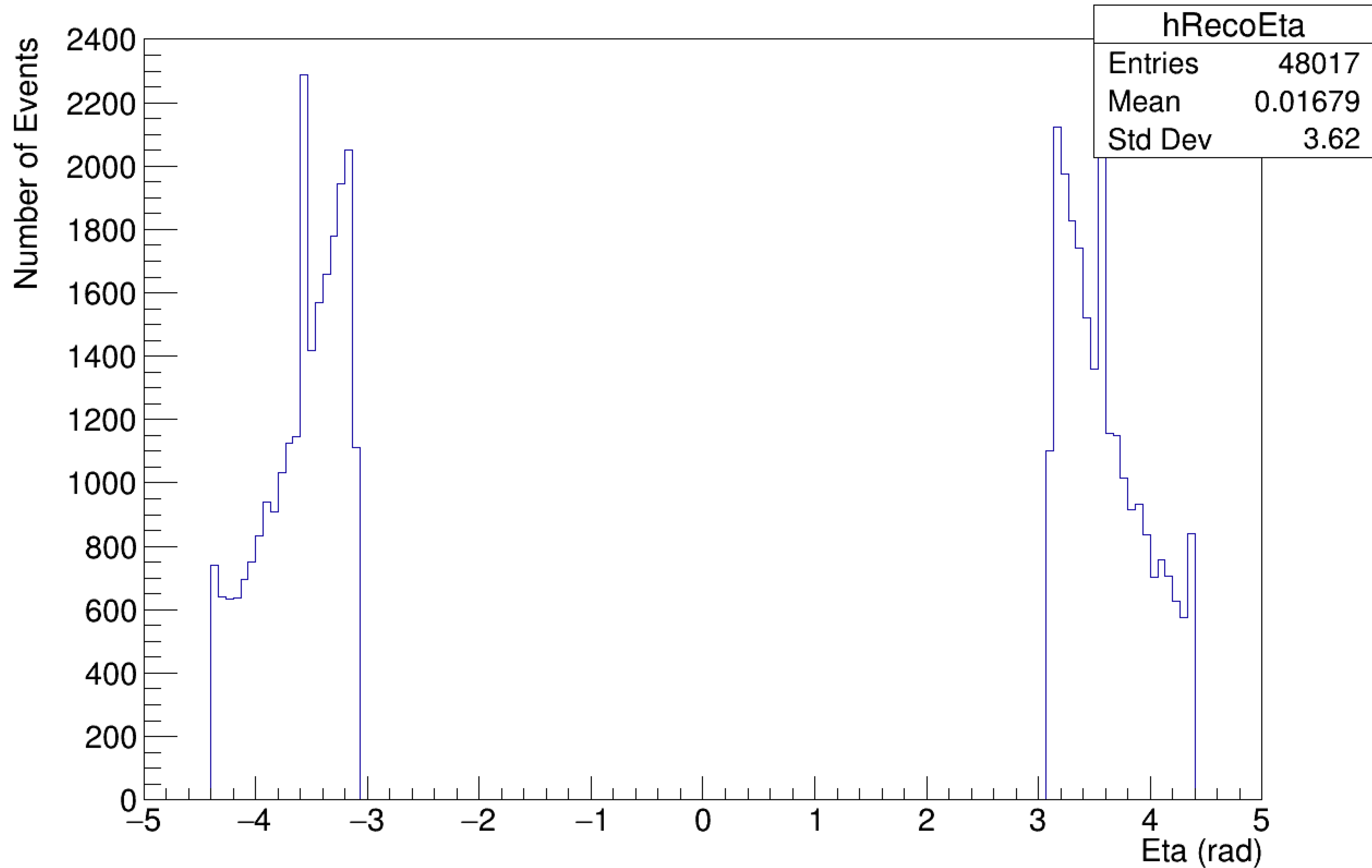
J/Psi 100k event, Theta



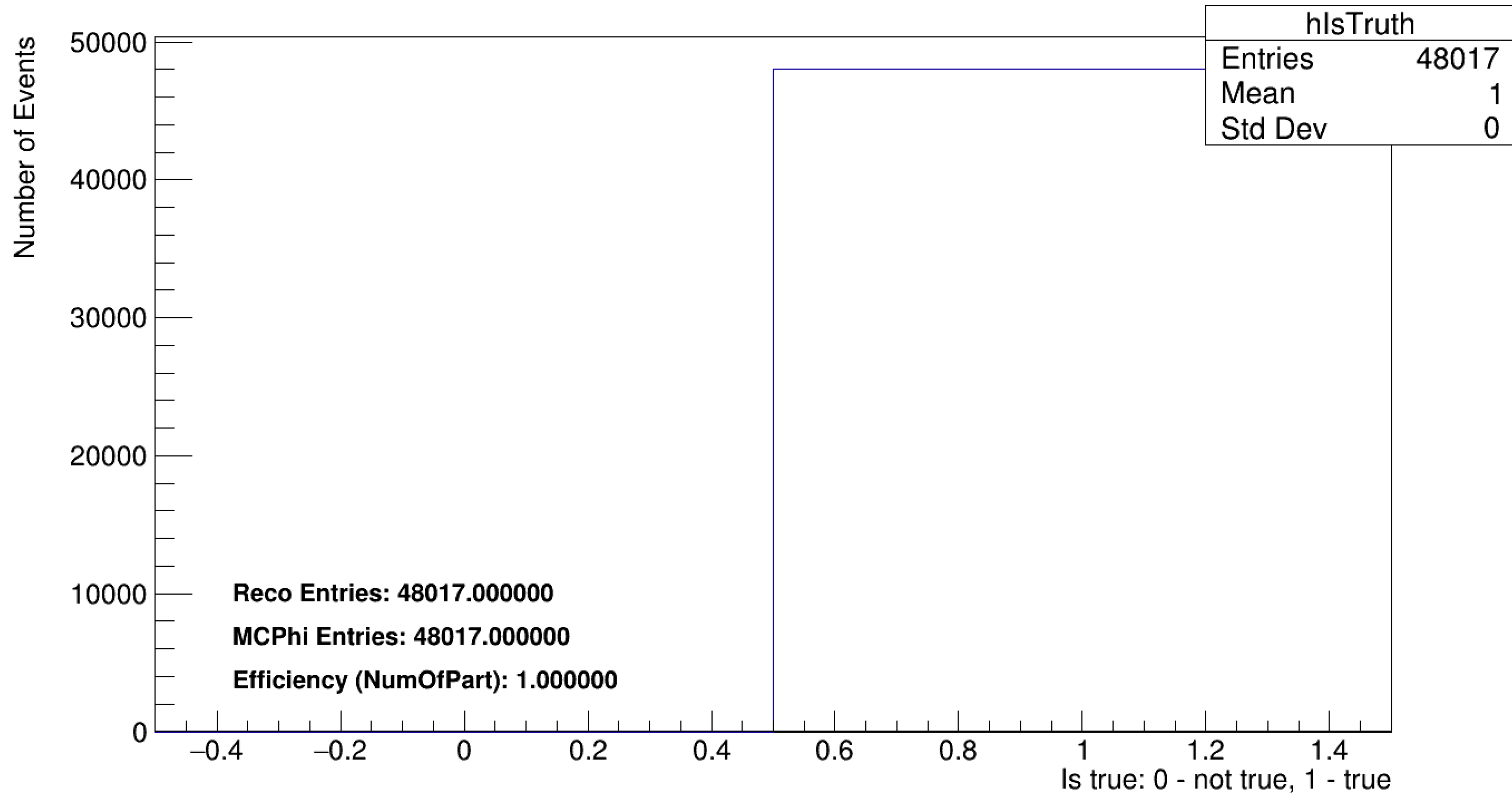
J/Psi 100k event, Phi



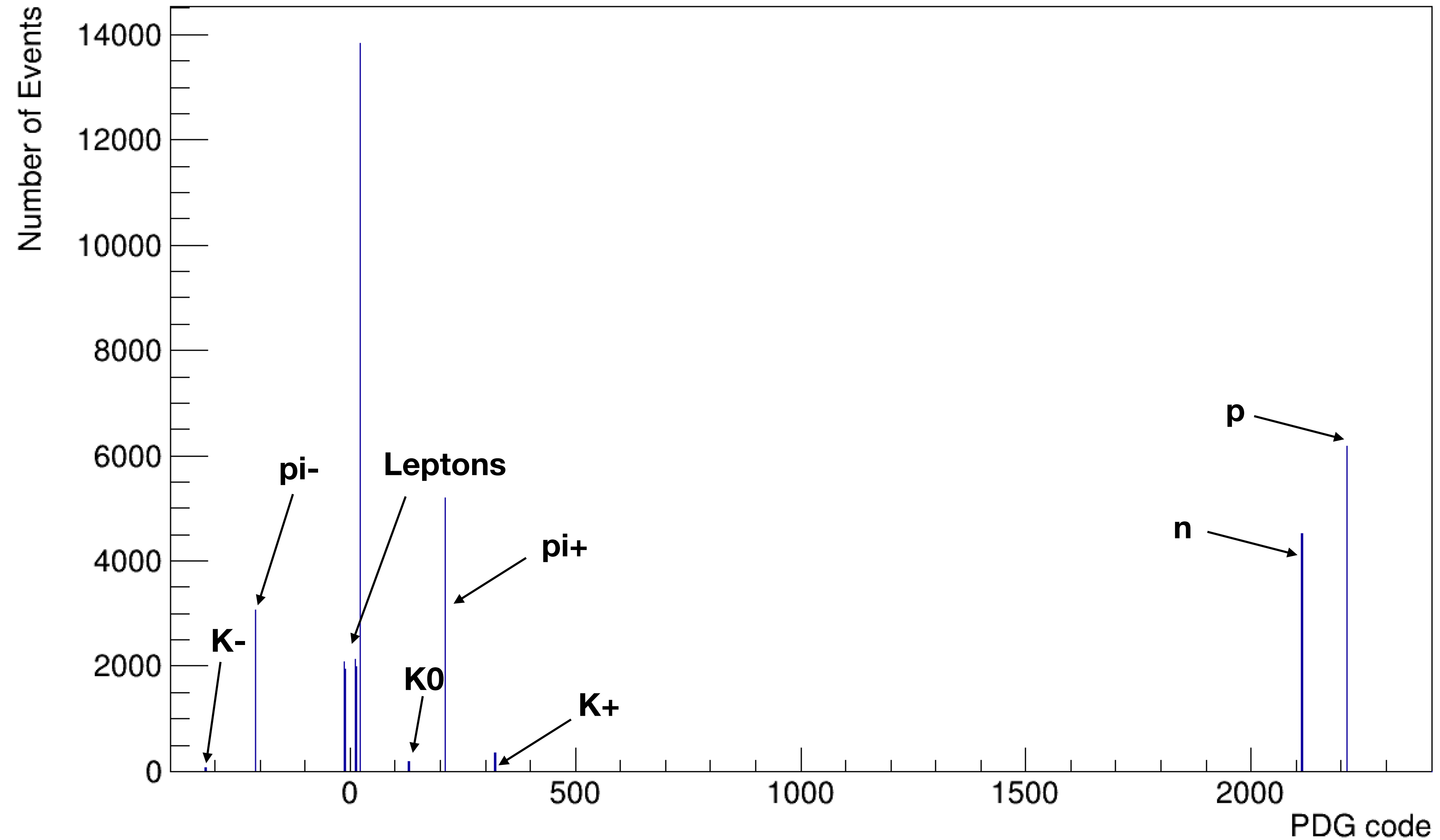
J/Psi 100k event, Pseudorapidity



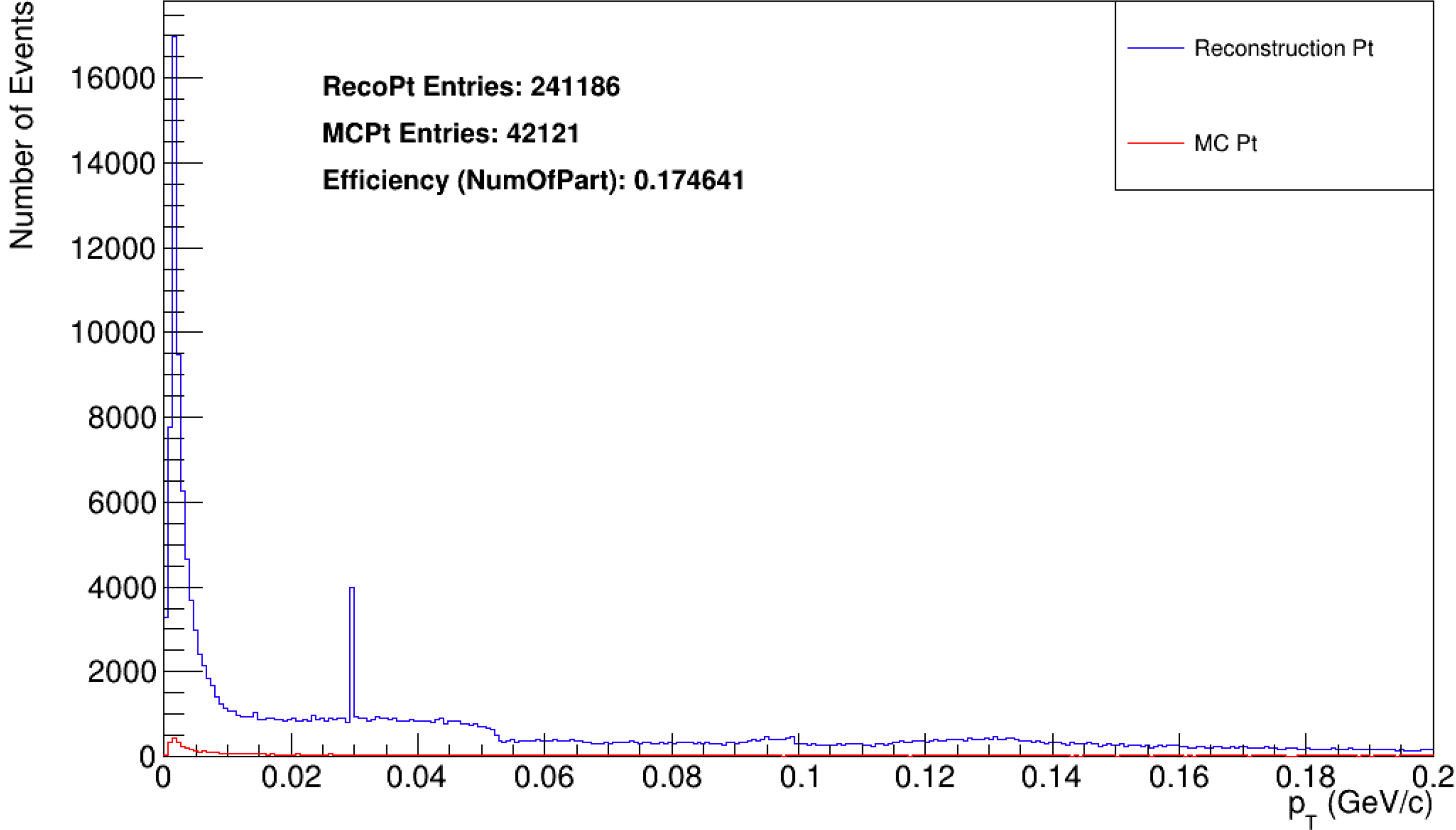
J/Psi 100k event, Number of Particles



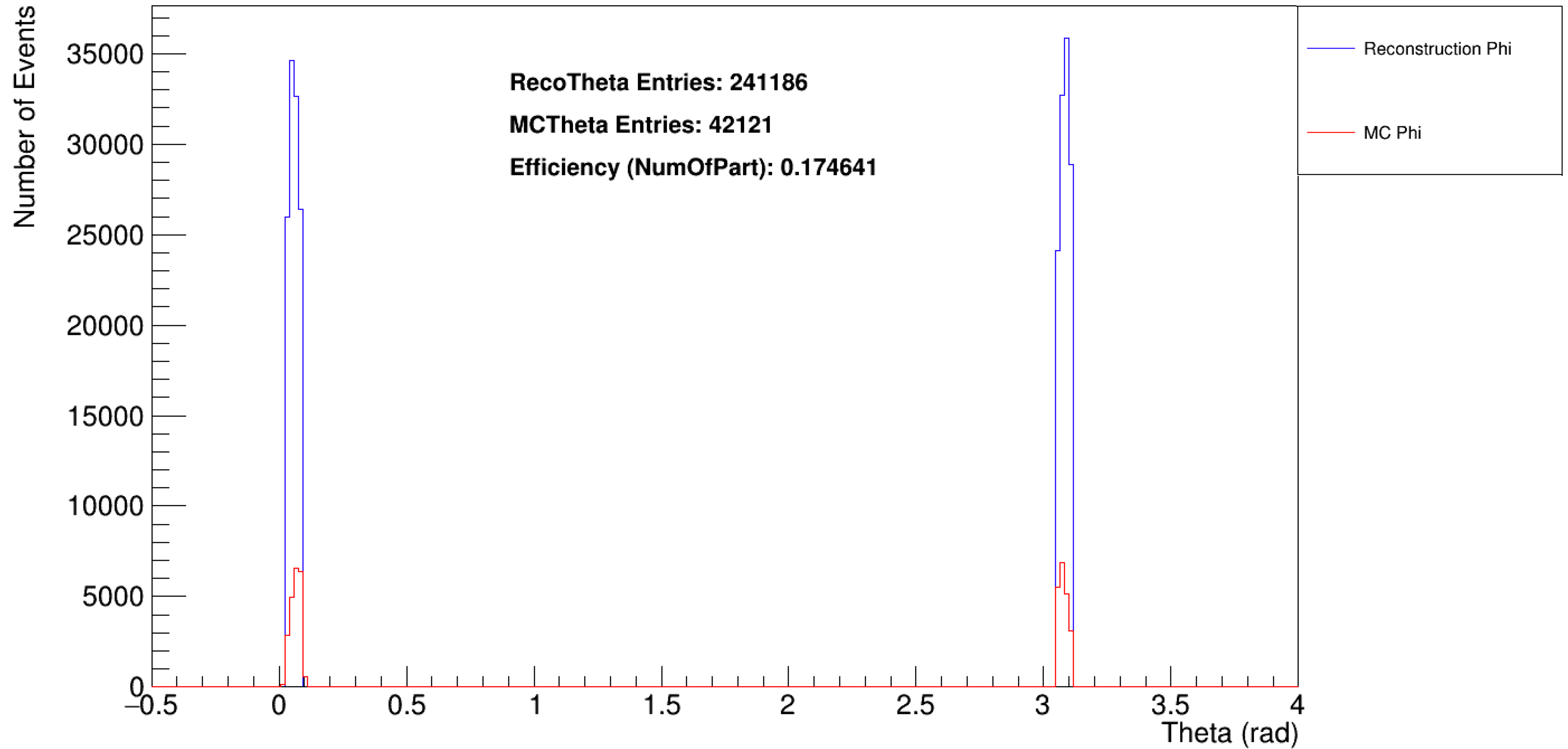
J/Psi 500k event, Produced particles



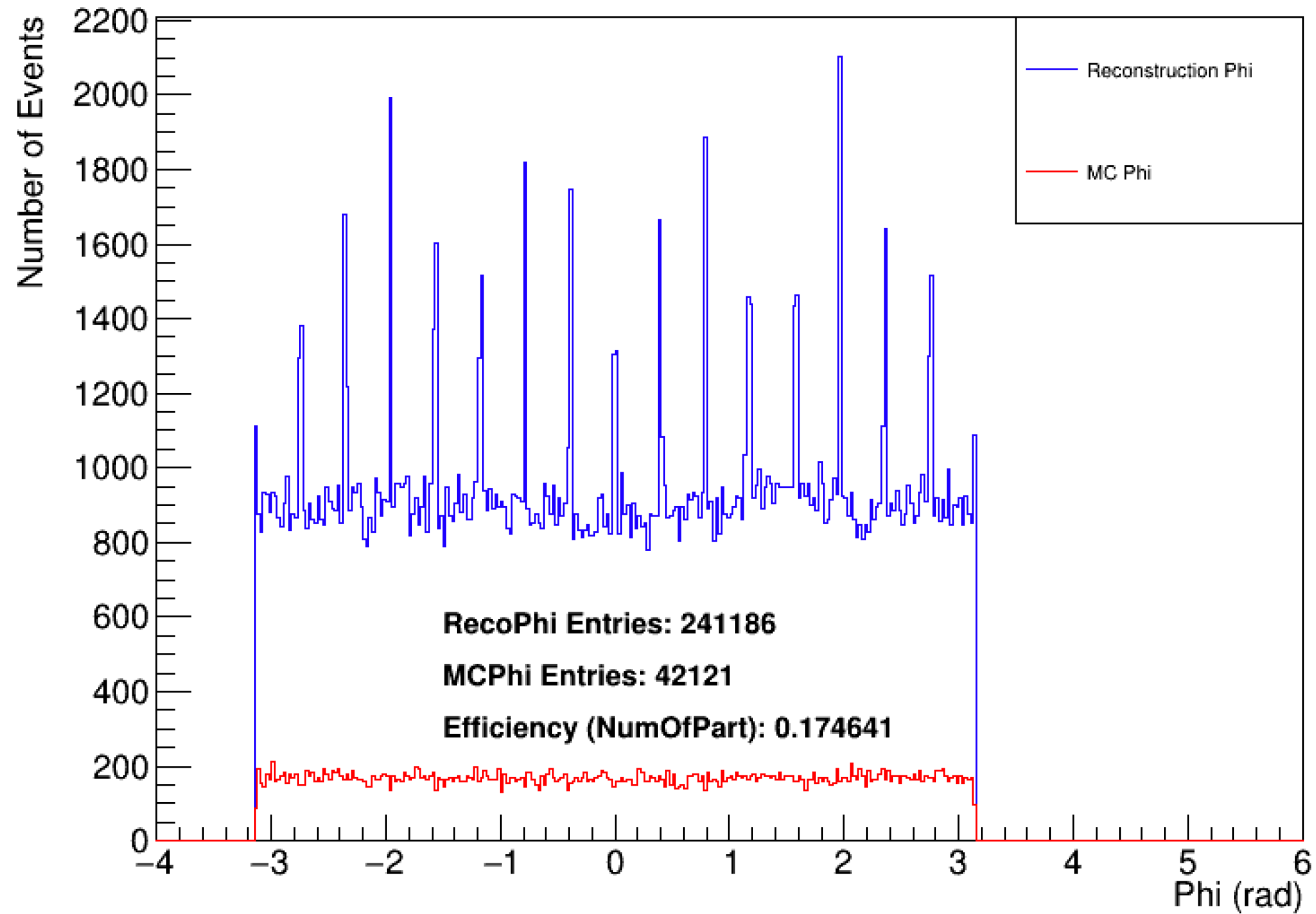
J/Psi 500k event, Pt



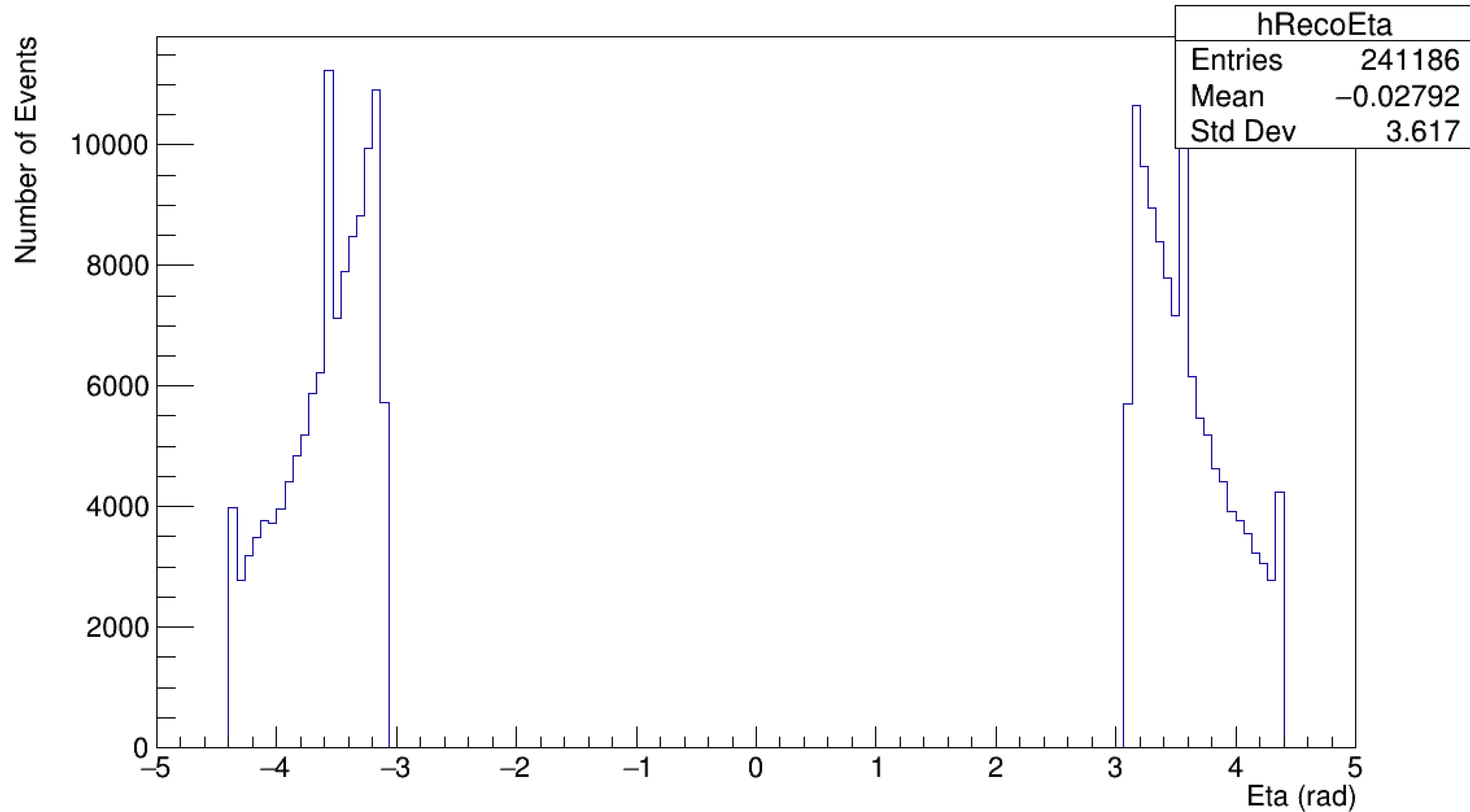
J/Psi 500k event, Theta



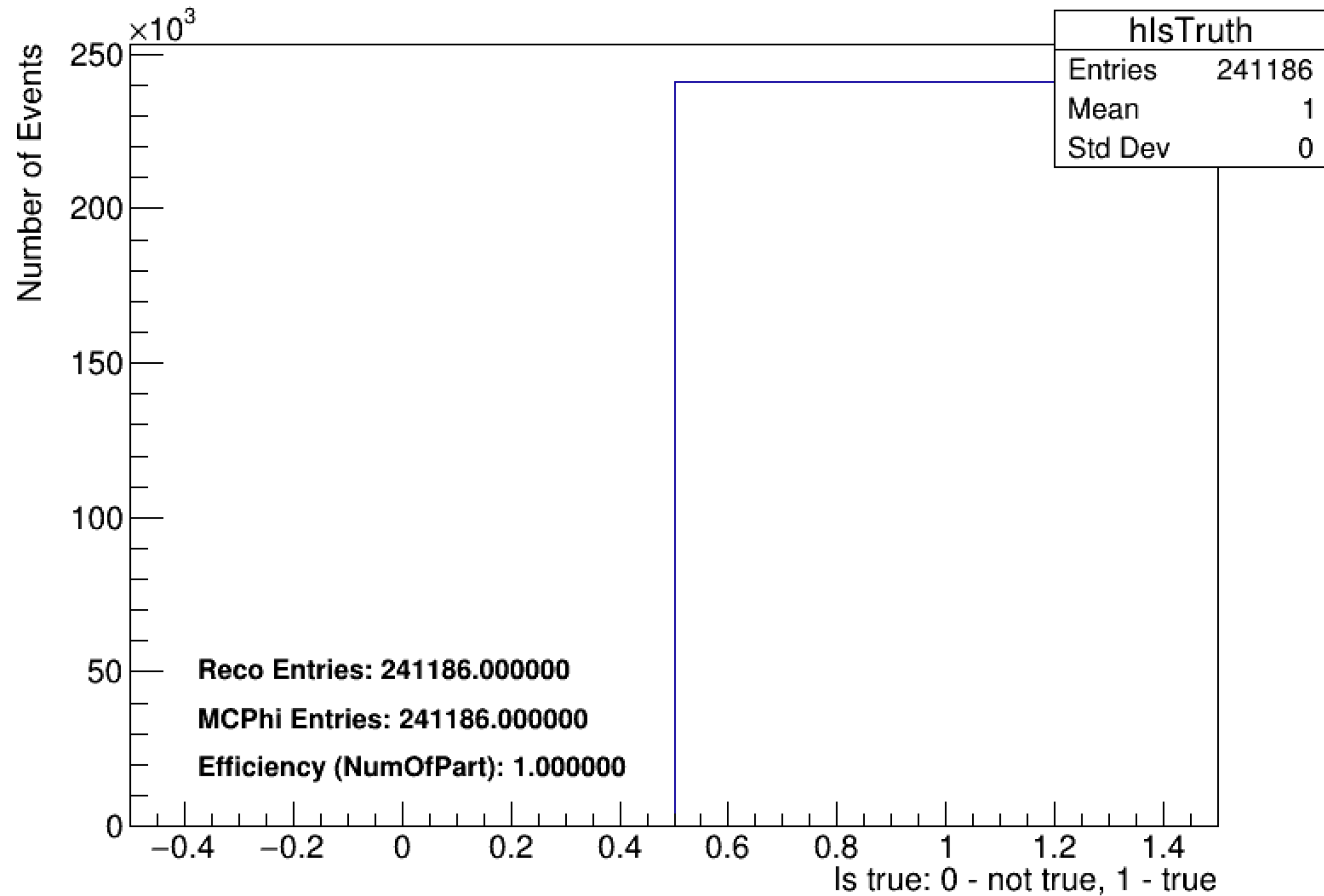
J/Psi 500k event, Phi



J/Psi 500k event, Pseudorapidity



J/Psi 500k event, Number of Particles



Спасибо за внимание!