

# Status Report

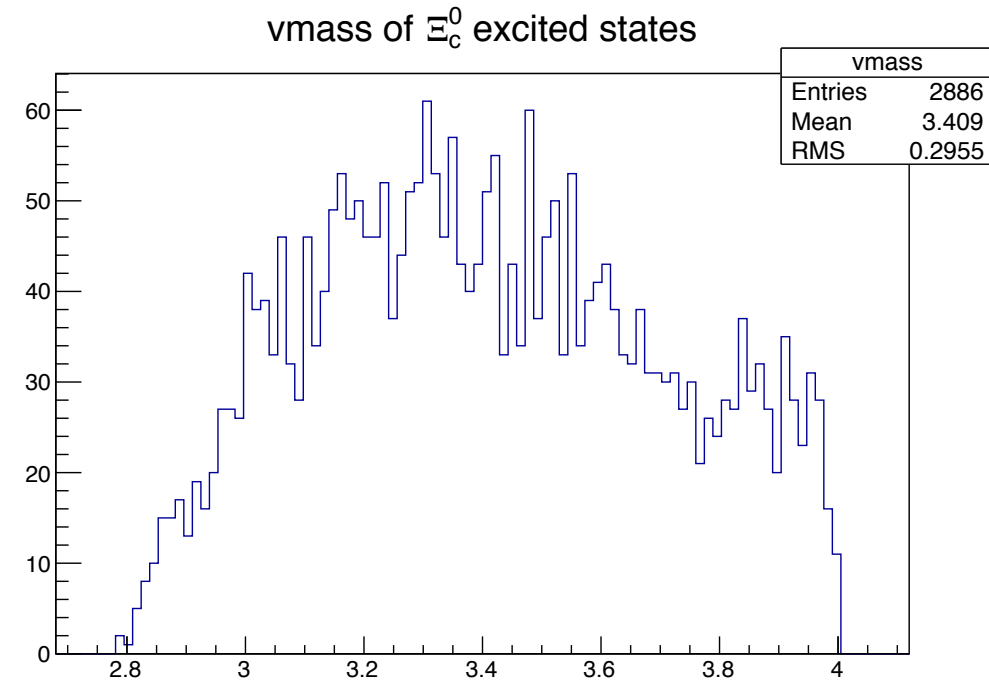
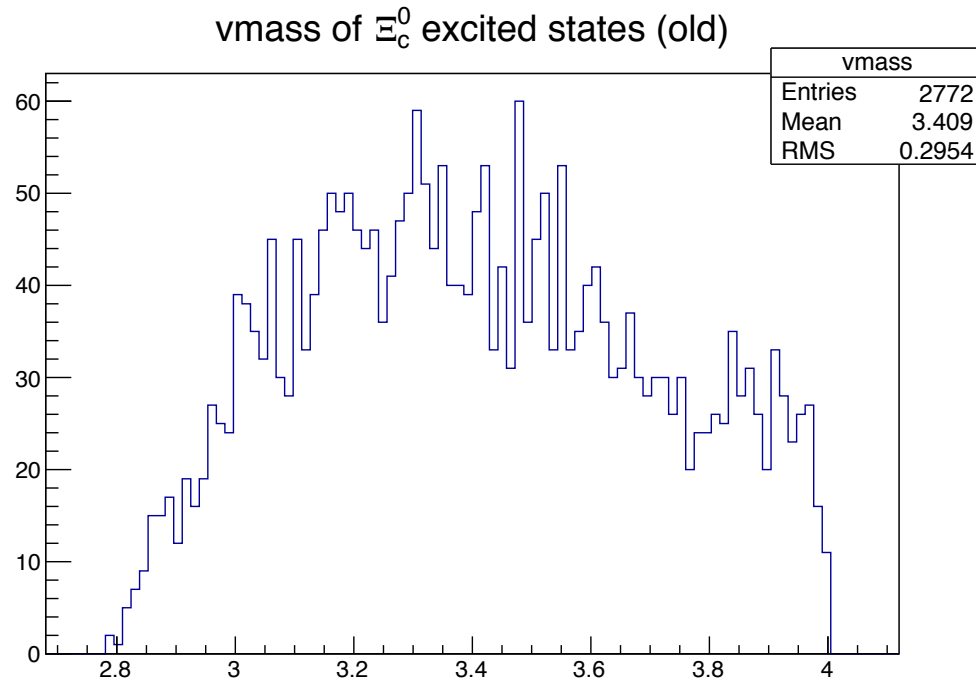
## - Code Refactoring -

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30th April, 2018

# Introduction

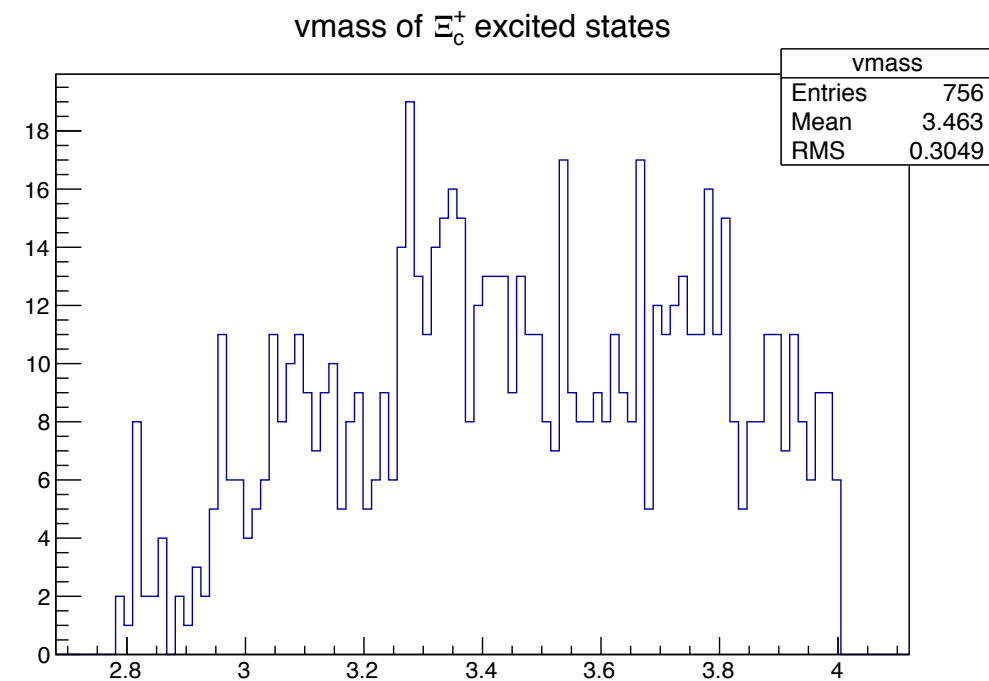
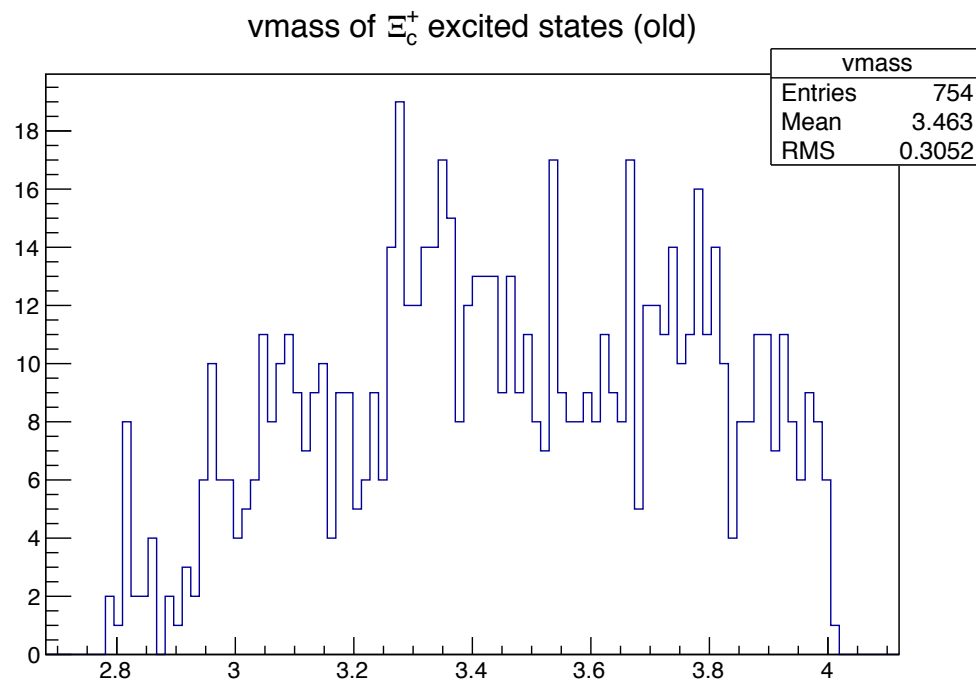
- $\Xi_c^{\text{excited}} \rightarrow \Xi_c^{\text{ground}} + \pi$ 's
  - $\Xi_c^{\text{ground}} \rightarrow \Xi$  baryon,  $\Omega$  baryon
- **Angular** information in  $\Xi_c^{\text{excited}} \rightarrow \Xi_c^{\text{ground}} + \pi$ 's

# Code Refactoring



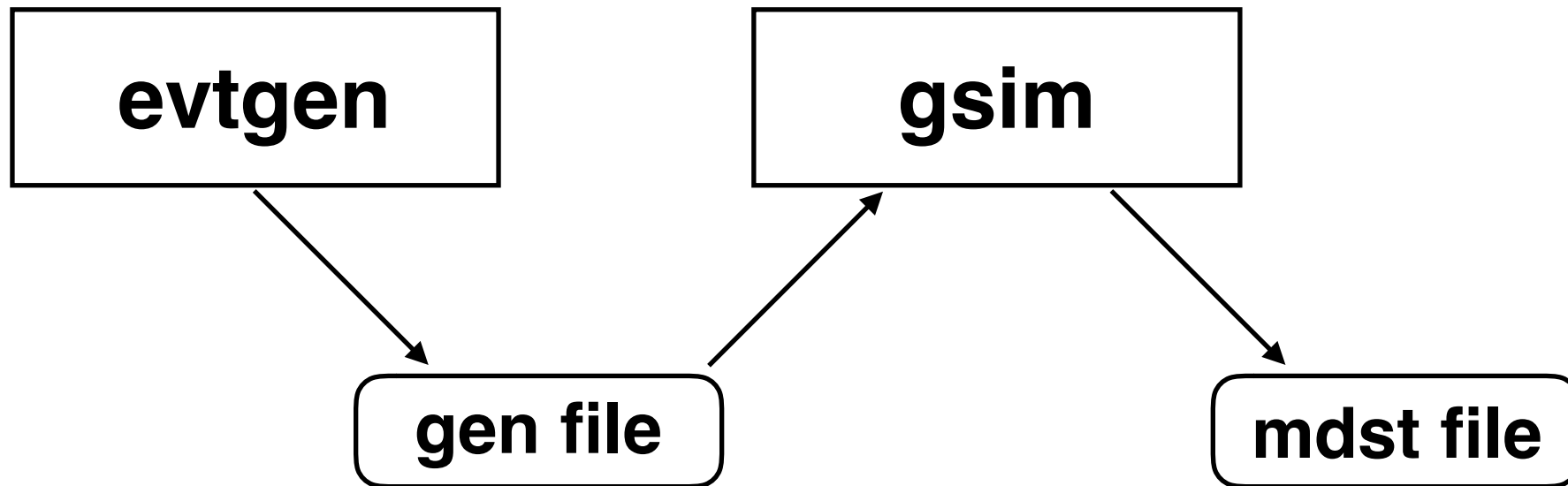
< Histogram for  $\Xi_c^0$  excited state >

**EXP11 only**



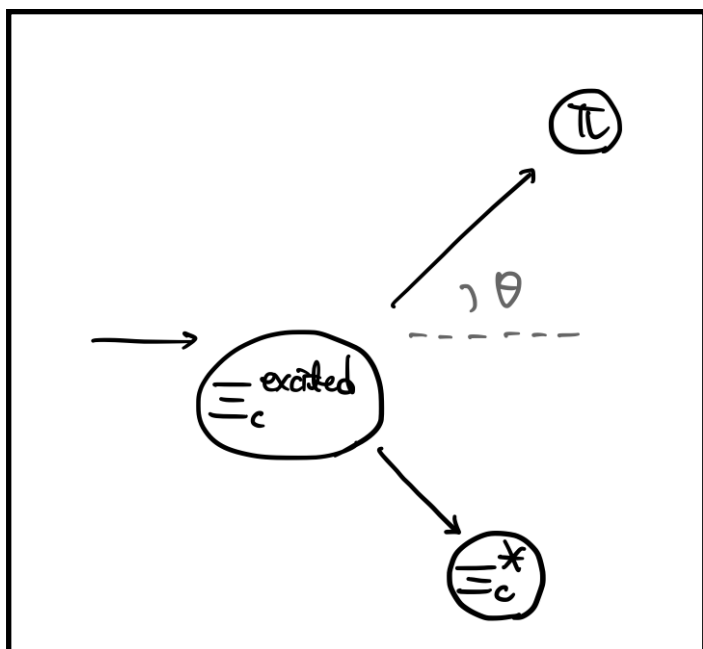
< Histogram for  $\Xi_c^+$  excited state >

# evtgen & gsim



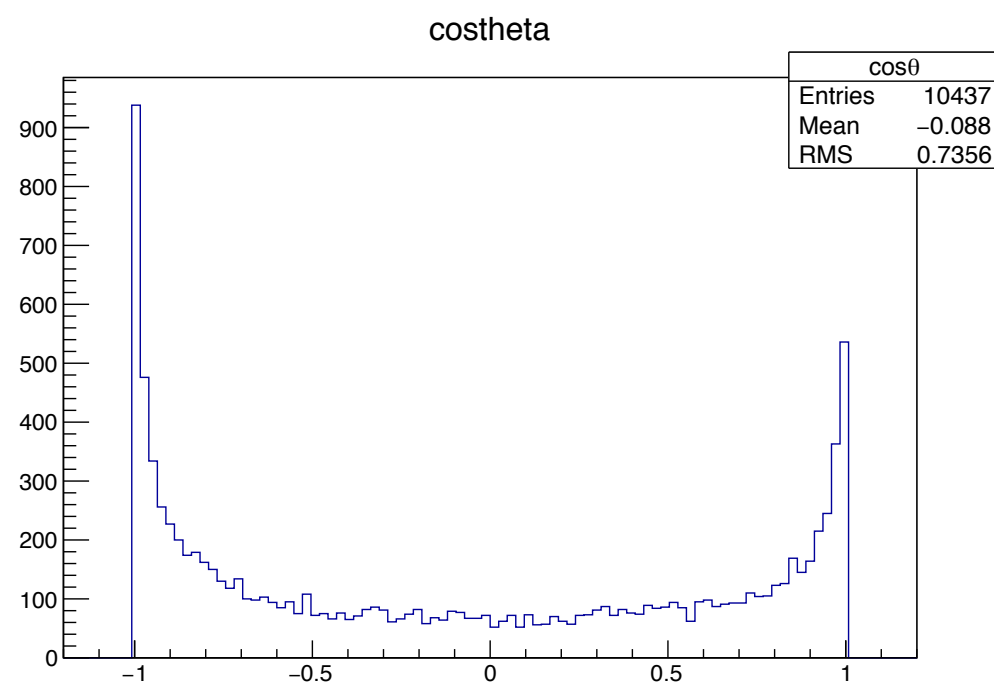
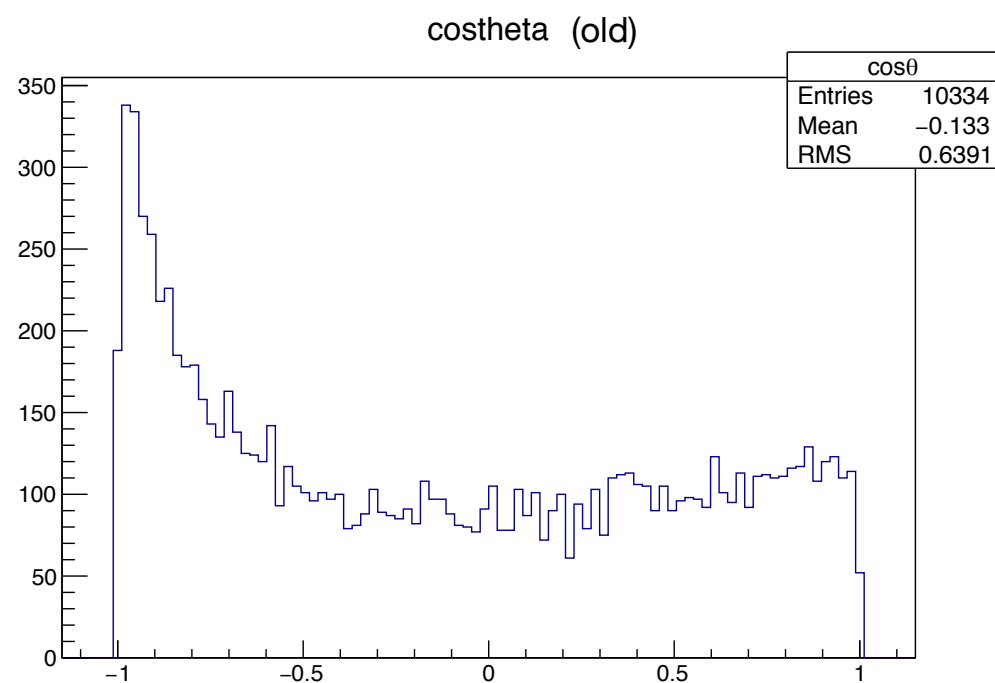
- evtgen : 사고 실험.
- gsim : 디텍터에 의한 효과 고려. 입자의 miss identification 및 id 실패도 포함.

# Cos Distritubion



< Definition of  $\theta$  >

- "Boost" problem is solved



< Histogram for  $\cos\theta$  in  $\Xi_c^+$  excited state >

# To Do

- Efficiency for angle  $\theta$ .
- Efficiency = (Yield from mdst file) / (Yield from gen file)
- $\cos \theta$ 에 대해 efficiency를 구한 후 보정에 사용.