$d(K^-, N)"\pi Y"$ Analysis

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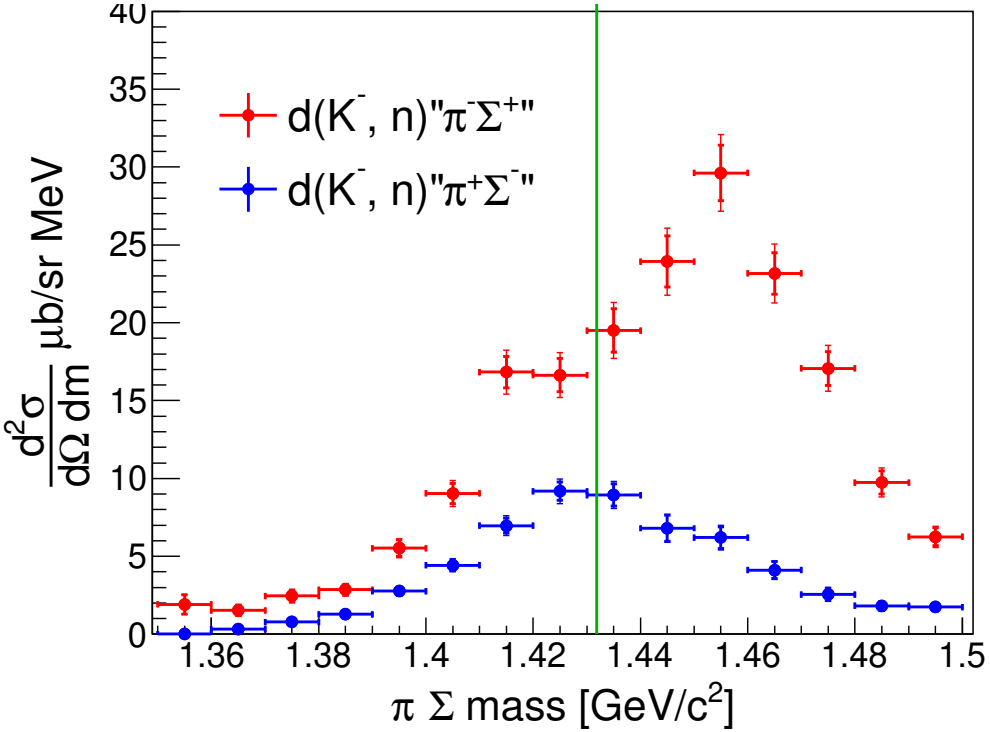
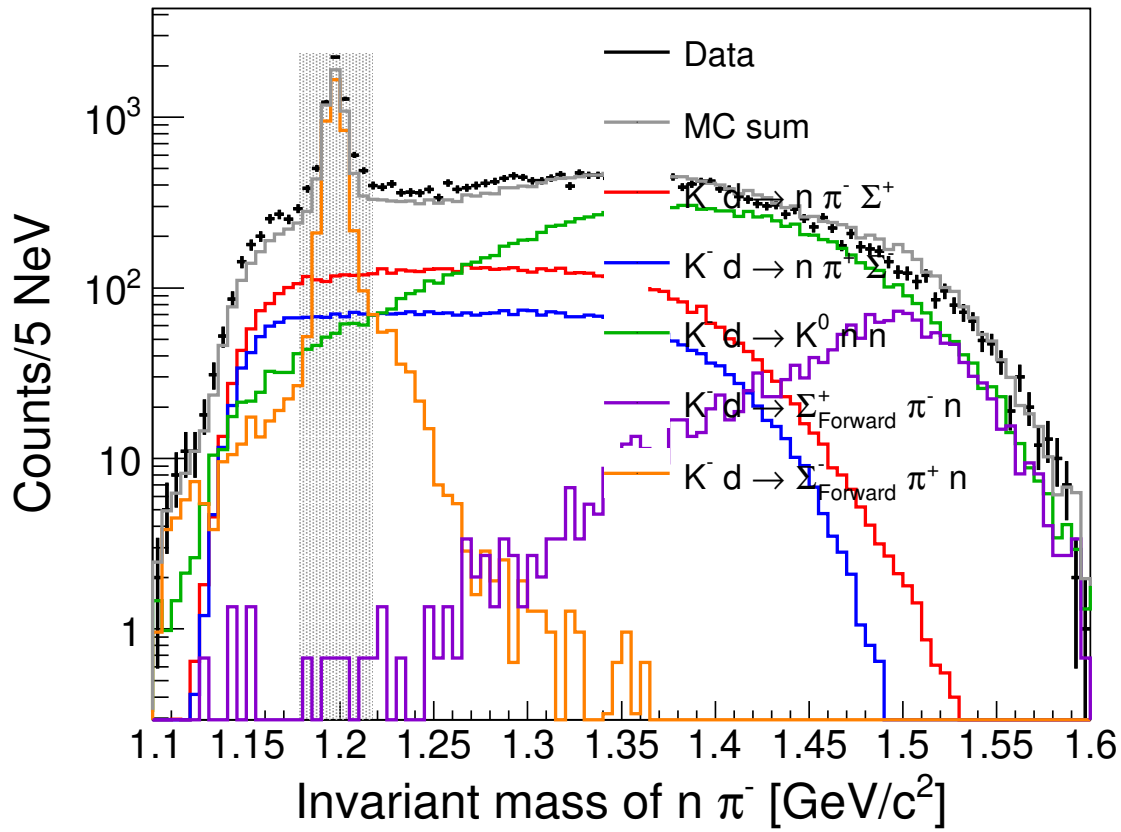
- Set Cross Section List for $K^- d \to n\Lambda(1405)$
- Above n scattered angle controled forward angle.
  $\to \Lambda(1405) = \pi\Sigma$ was generated backward.
- Line shape (Kpp) was adopted on $\Lambda(1405)$ shape.

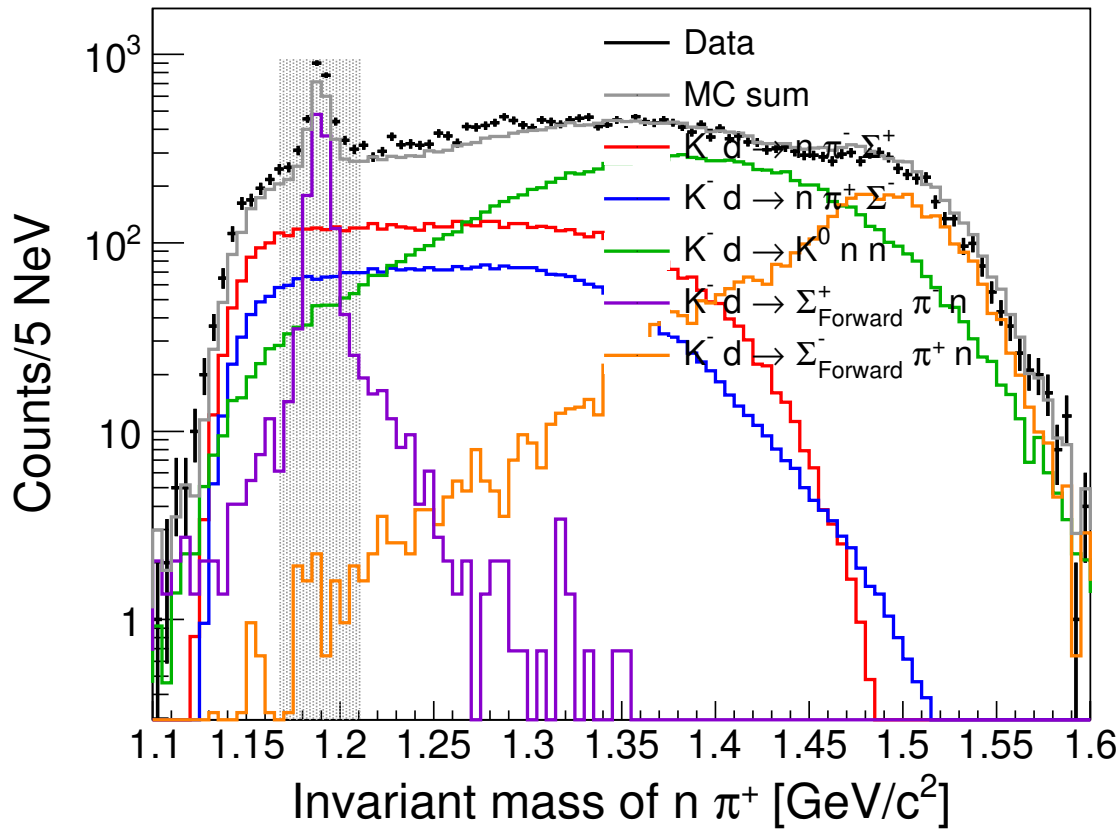
$\to$ Evidence figure of correctly adaptation.

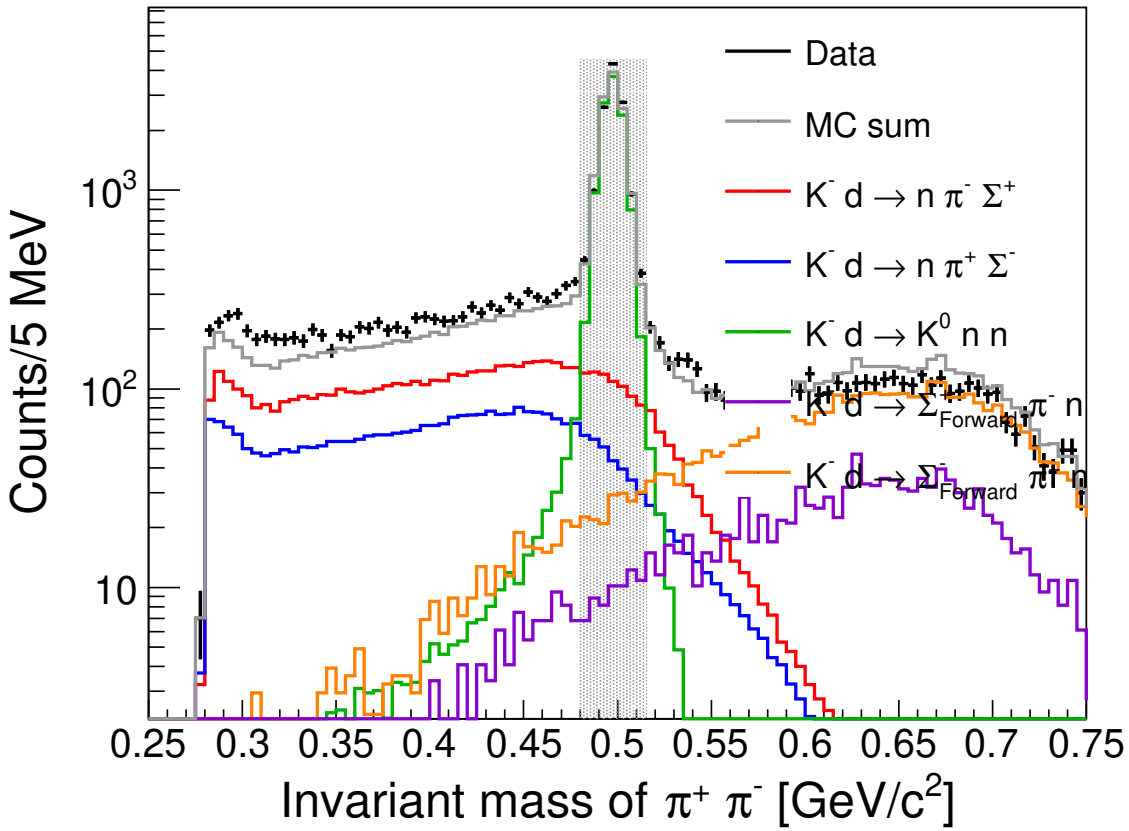
Raw Spectra

You should controll decay mode.
You should controll inital n angular dist ($\theta_n < 8 degree$)
You should controll $\pi^+\Sigma^-$ mass spectrum.

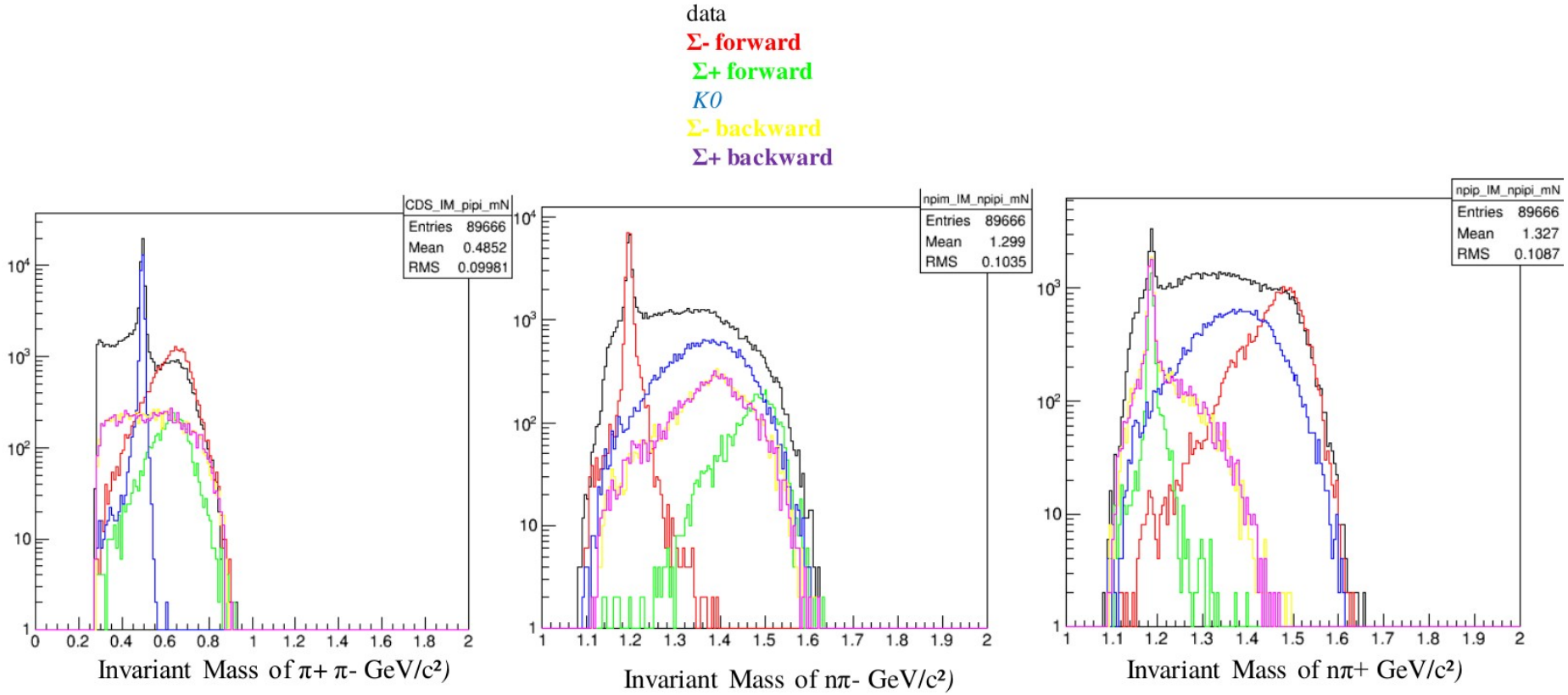



Data
MC sum
K⁻ d → n π⁻ Σ⁺
K⁻ d → n π⁻ Σ⁰
K⁻ d → K⁰ n n
K⁻ d → Σ⁺Forward π⁻ n
K⁻ d → Σ⁻Forward π⁺ n
Counts/5 NeV
10³
10²
10
1
1.1 1.15 1.2 1.25 1.3 1.35 1.4 1.45 1.5 1.55 1.6
Invariant mass of n π⁻ [GeV/c²]


Data
MC sum
$K^- d \to n \pi^- \Sigma^+$
$K^- d \to n \pi^+ \Sigma^-$
$K^- d \to K^0 n n$
$K^- d \to \Sigma^+_{\mathrm{Forward}} \pi^- n$
$K^- d \to \Sigma^-_{\mathrm{Forward}} \pi^+ n$
Counts/5 NeV
10^3
10^2
10
1
1.1 1.15 1.2 1.25 1.3 1.35 1.4 1.45 1.5 1.55 1.6
Invariant mass of n π^+ [GeV/c^2]


Data
MC sum
K⁻ d → n π⁻ Σ⁺
K⁻ d → n π⁺ Σ⁻
K⁻ d → K⁰ n n
K⁻ d → Σ⁺ Forward π⁻ n
K⁻ d → Σ⁻ Forward π⁺ n
Counts/5 MeV
10³
10²
10
0.25 0.3 0.35 0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.75
Invariant mass of π⁺ π⁻ [GeV/c²]

Will two problem be mixed ?
Is truly use same data sets ?



Isotropically mass dist ?

Phase space ?