Progress

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Questions and comments: PS meeting

-) using the combinations closest to omega and eta to select the three pions from omega and eta decays, respectively, it may distort the background shape (just as you mentioned on slides 32), how do you estimate its impact on the results?

-) the goodness of fit for the pi+pi-pi0 invariant mass spectrum is quite worse, it may has a large impact on the branching fraction measurement for normalizing the upper limit

-) For both Psi-->phi eta and Psi-->omega eta, the normalized branching fractions are both different from those presented in the previous P&S meeting, which can not be explained by the statistical fluctuations. Please check where this clear discrepancy is from.

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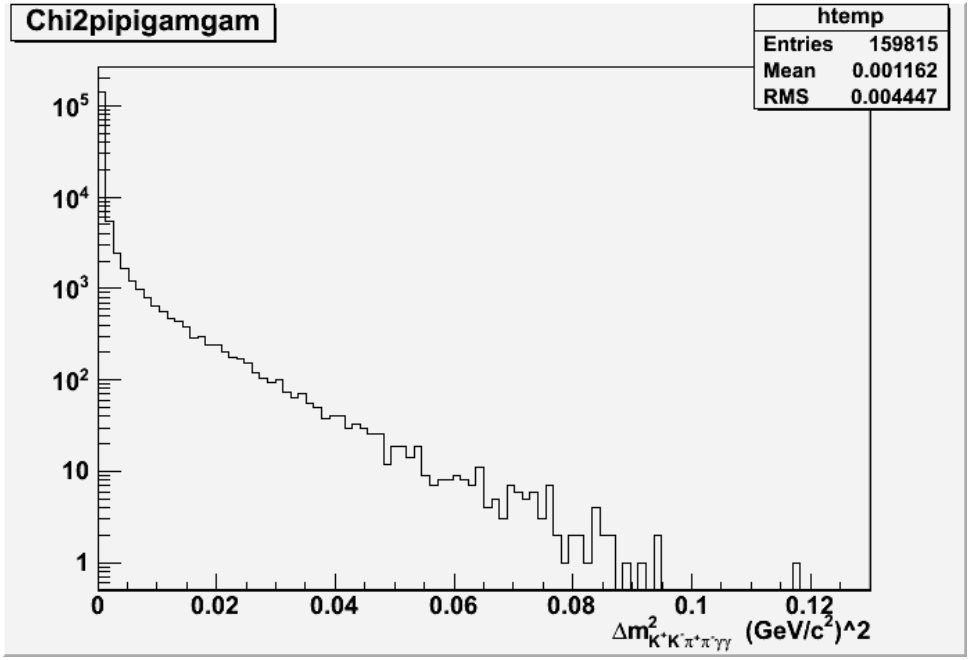
using the combinations closest to omega and eta to select the three pions from omega and eta decays, respectively, it may distort the background shape (just as you mentioned on slides 32), how do you estimate its impact on the results?

In order to avoid this kind of situation, we require that the total 4-momentum of the daughter particles must be closest to the 4-momentum of parent particle.

$$\Delta m^2 = E_{J/\psi}^2 - (\sum E_{daut}^2 - \sum P_{daut}^2)$$



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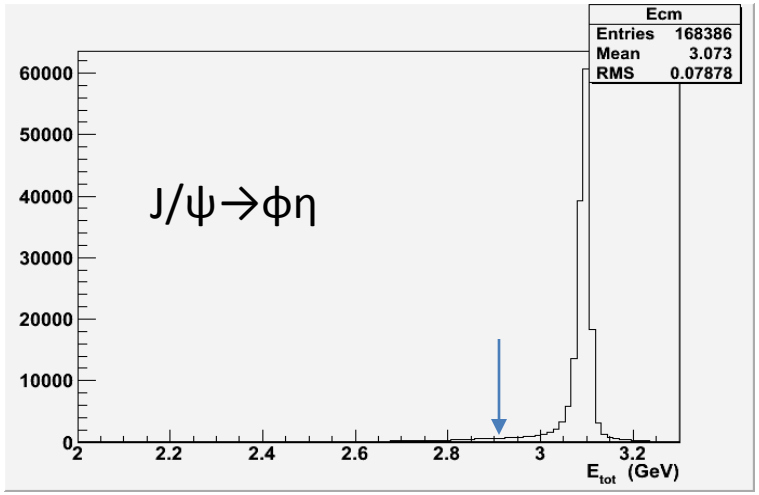

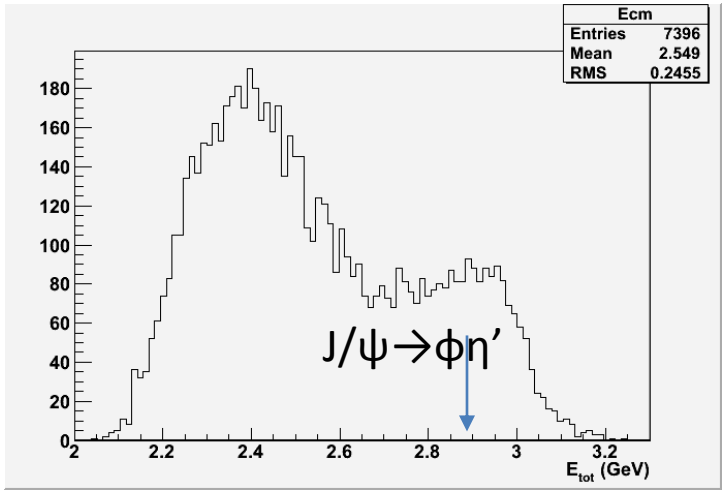

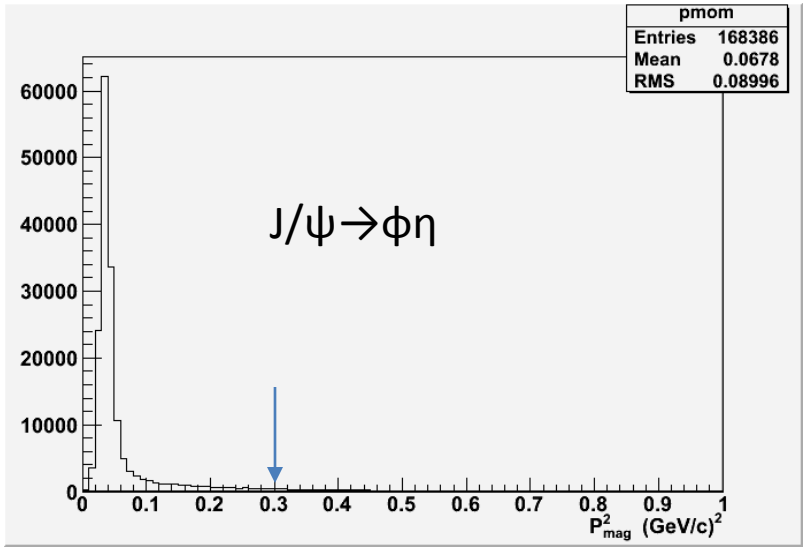

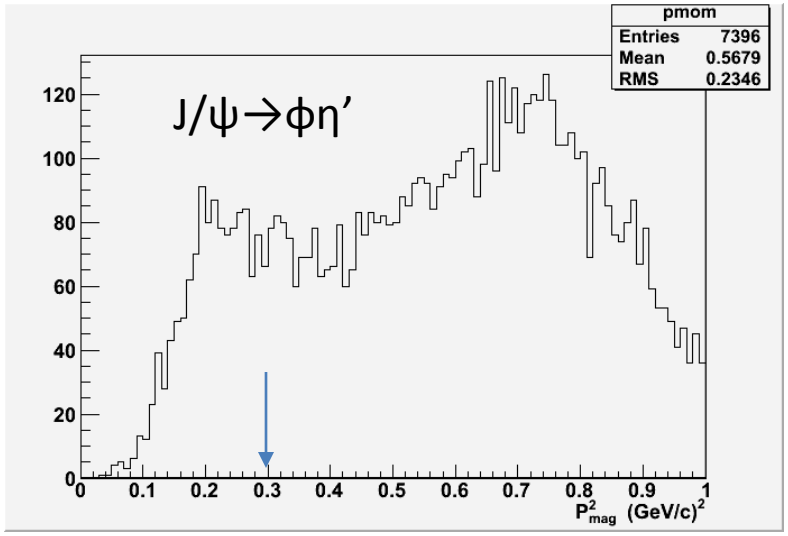

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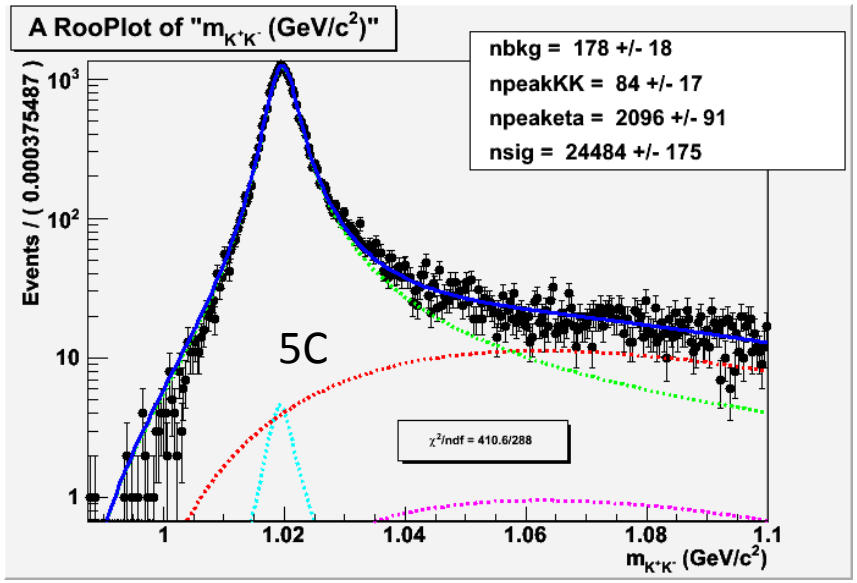
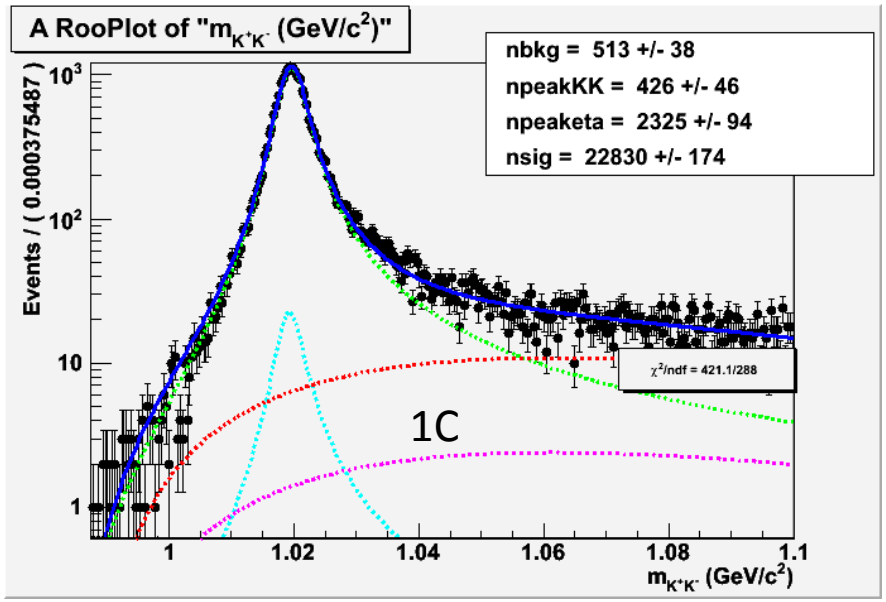




Peaking backgrounds:

$J/\psi \to \phi\eta$, $\phi \to K^+K^-$, $\eta \to \gamma\pi^+\pi^-$ 93.83 event

$J/\psi \to \phi\eta'$ 0 event

Signal efficiency = 20.236%

$B(J/\psi \to \phi\eta) = (8.30 \pm 0.06) \times 10^{-4}$

Peaking backgrounds:

$J/\psi \to \phi\eta$, $\phi \to K^+K^-$, $\eta \to \gamma\pi^+\pi^-$ 272 event

$J/\psi \to \phi\eta'$ 76.97 event

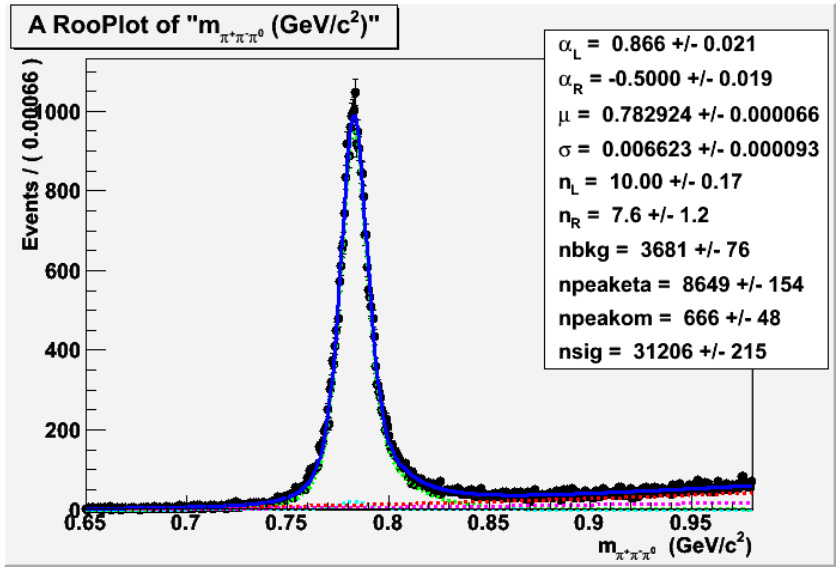
Signal efficiency = 18.16%

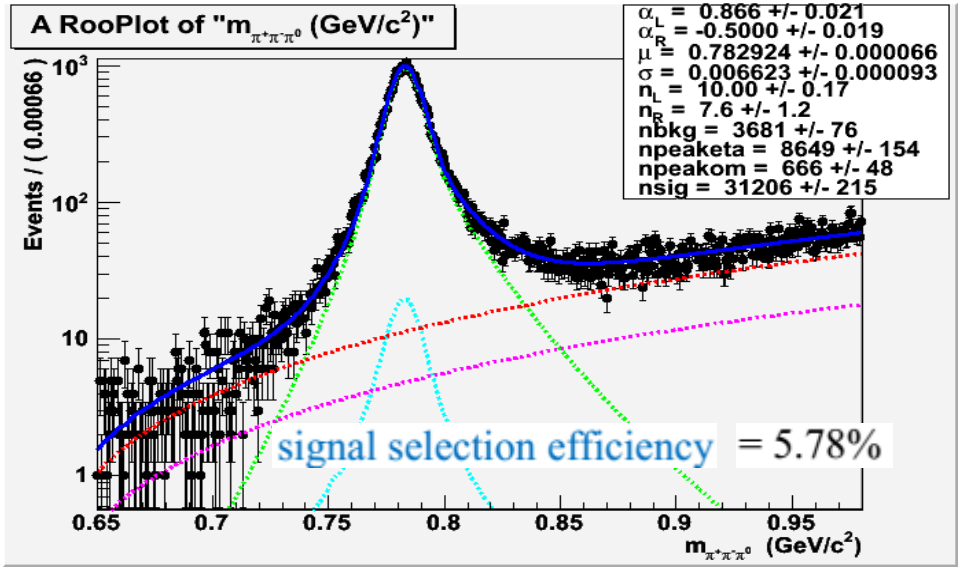
$B(J/\psi \to \phi\eta) = (8.52 \pm 0.07) \times 10^{-4}$

Diff = 2.65%

Questions and comments: PS meeting

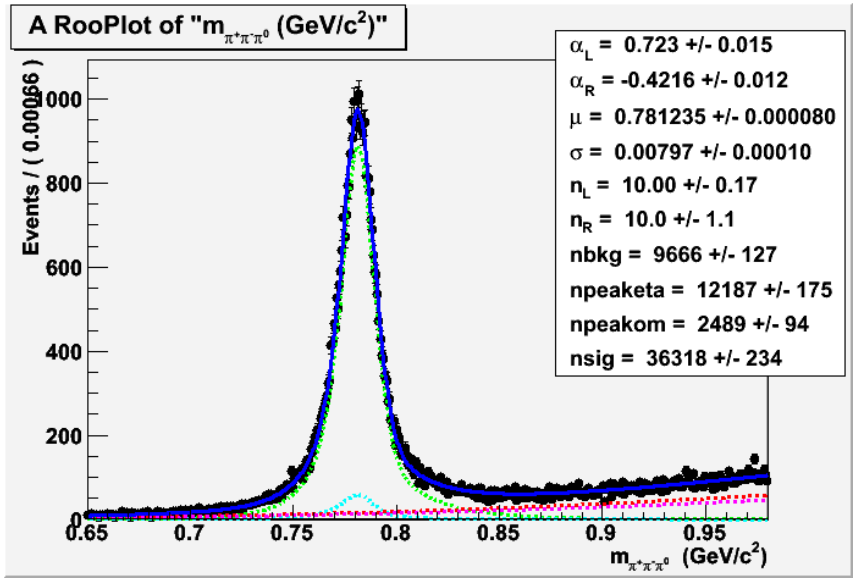
For 6 C kinematic fit

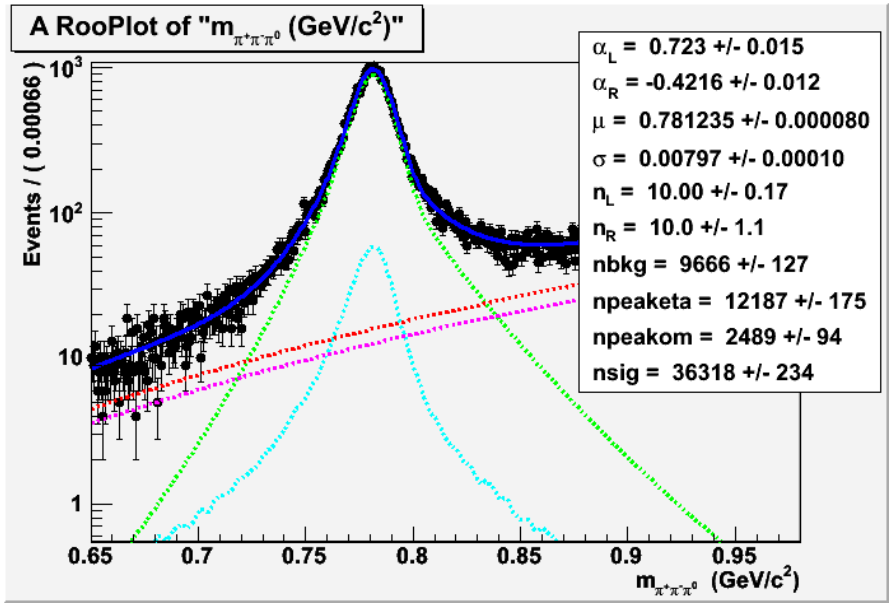




$$B(J/\psi \to \omega\eta) = (2.06 \pm 0.014) \times 10^{-3}$$

Questions and comments: PS meeting





Signal efficiency = 6.85%

$$B(J/\psi \to \omega\eta) = (2.025 \pm 0.013) \times 10^{-3}$$

Diff = 1.88%