

Dimuon invariant mass distribution

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JSON file

Cert_271036-274240_13TeV_PromptReco_Collisions16_JSON.txt

Selection(muon)

Singel muon $P_t > 2$

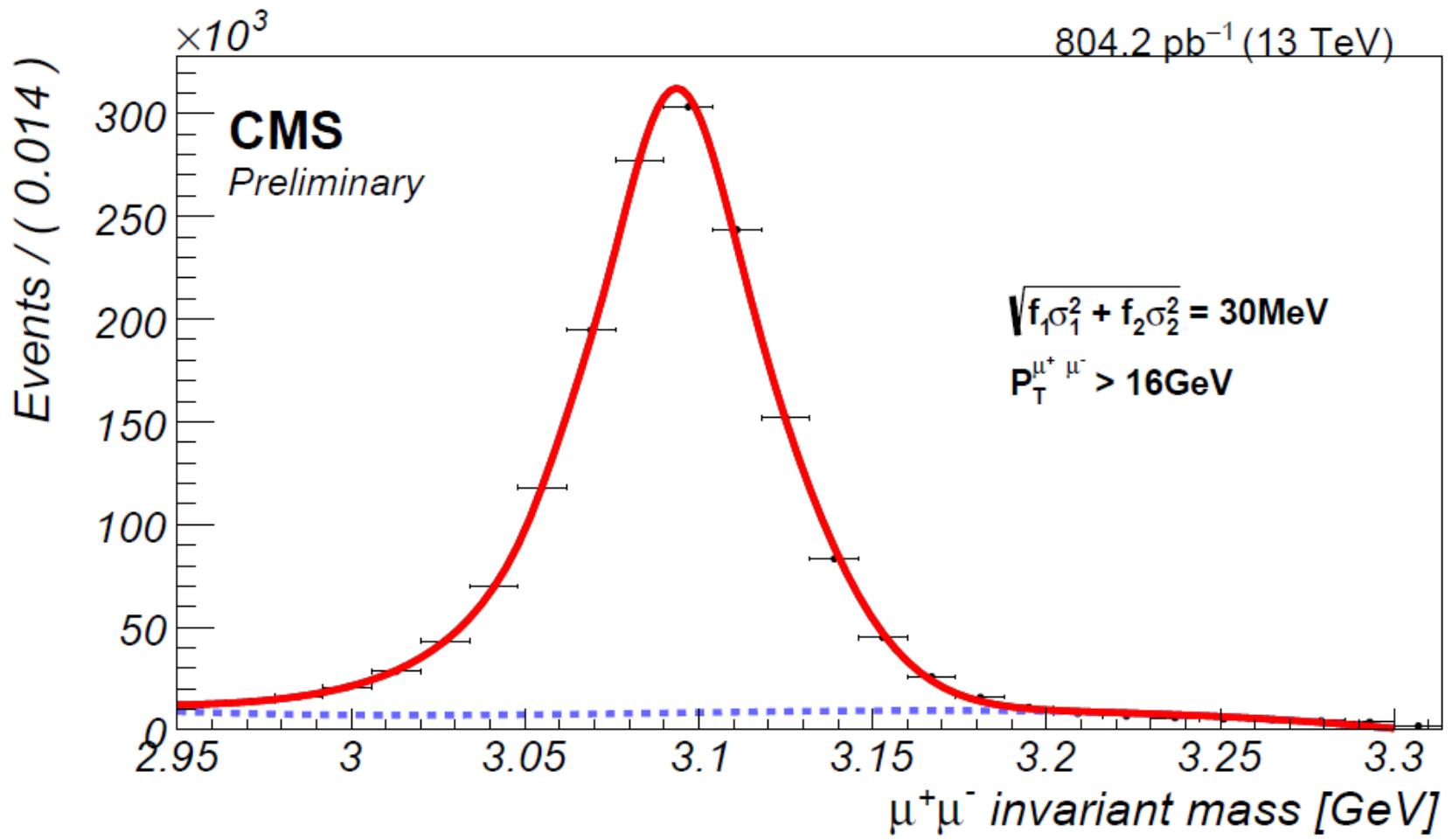
Muon ID : soft

TrackType: INNER

Dimuon invariant mass of J/ ψ

- Dataset: Charmonium – Prompt_v2
- Selection: 2 muons passing Soft ID
- Trigger: HLT_Dimuon 16_Jpsi
- Fit Method
 - Mass PDF: double Crystal Ball with common mean, n and alpha parameters
 - Background PDF: Chebychev polynomial series of order 2
- Quoted resolution: weighted quadrature sum of the two CB sigmas

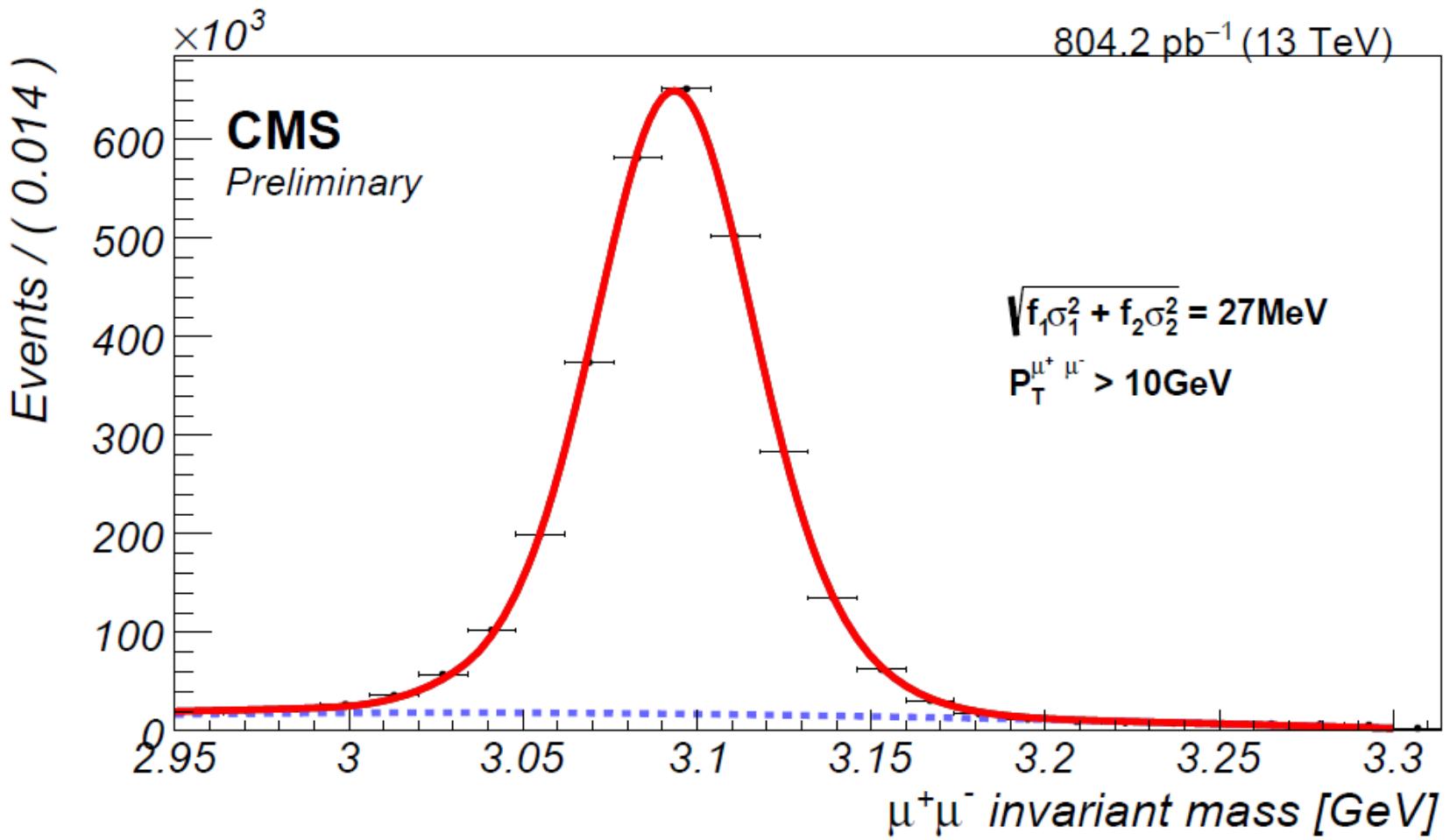
Dimuon invariant mass of J/ ψ



Dimuon invariant mass of J/ ψ

- Dataset: Charmonium – Prompt_v2
- Selection: 2 muons passing Soft ID
- Trigger: HLT_Dimuon 10_Jpsi_Barrel
- Fit Method
 - Mass PDF: double Crystal Ball with common mean, n and alpha parameters
 - Background PDF: Chebychev polynomial series of order 2
- Quoted resolution: weighted quadrature sum of the two CB sigmas

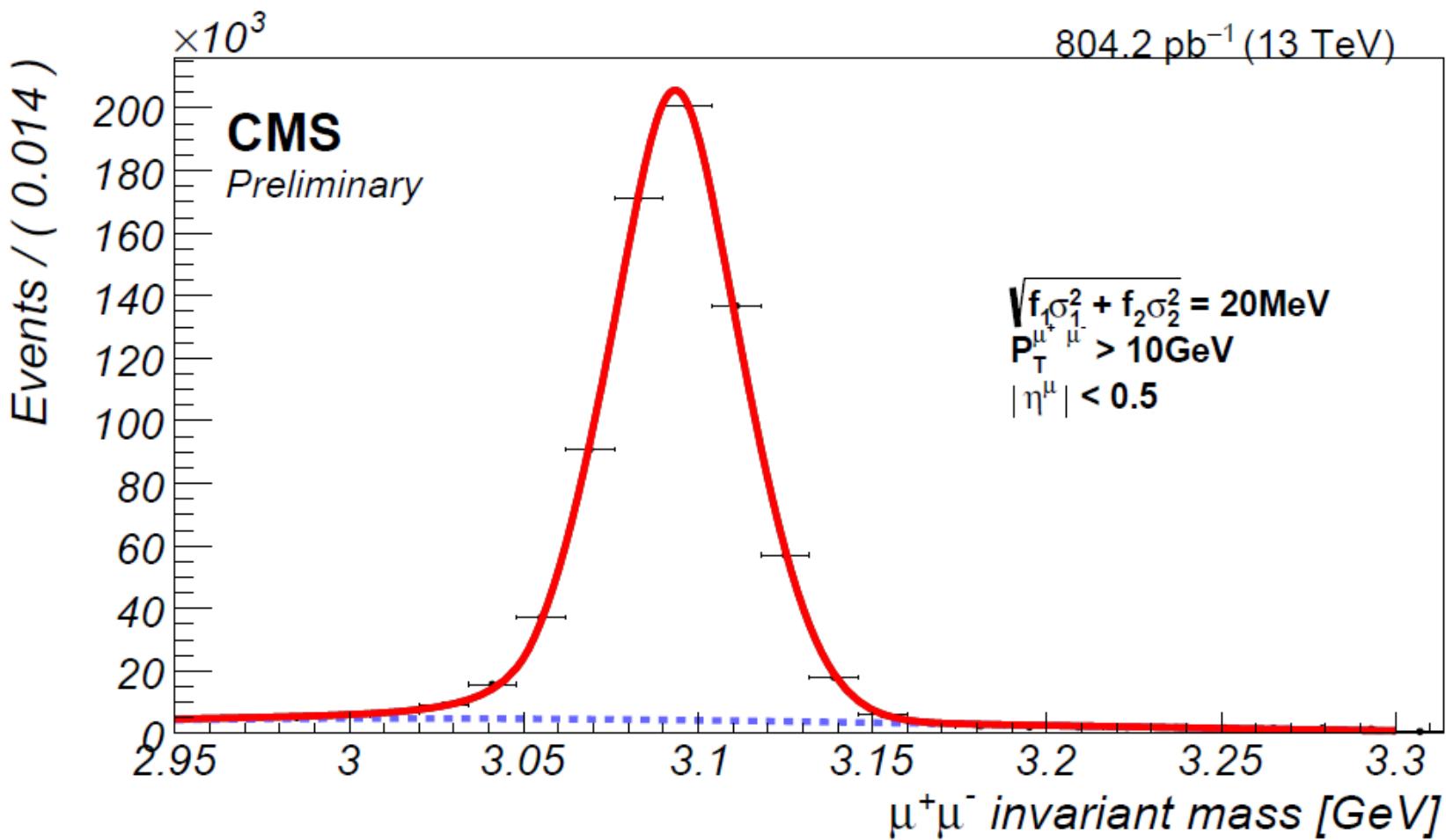
Dimuon invariant mass of J/ ψ



Dimuon invariant mass of J/ ψ

- Dataset: Charmonium – Prompt_v2
- Selection: 2 muons passing Soft ID, $|\eta^\mu| < 0.5$
- Trigger: HLT_Dimuon 10_Jpsi_Barrel
- Fit Method
 - Mass PDF: double Crystal Ball with common mean, n and alpha parameters
 - Background PDF: Chebychev polynomial series of order 2
- Quoted resolution: weighted quadrature sum of the two CB sigmas

Dimuon invariant mass of J/ ψ



Dimuon invariant mass of $\Upsilon(nS)$

- Dataset: MuOnia – Prompt_v2
- Selection: 2 muons passing Soft ID
- Trigger: HLT_Dimuon 13_Upsilon
- Fit Method

$\Upsilon(1S)$ Mass PDF: double Crystal Ball with common mean, n and alpha parameters

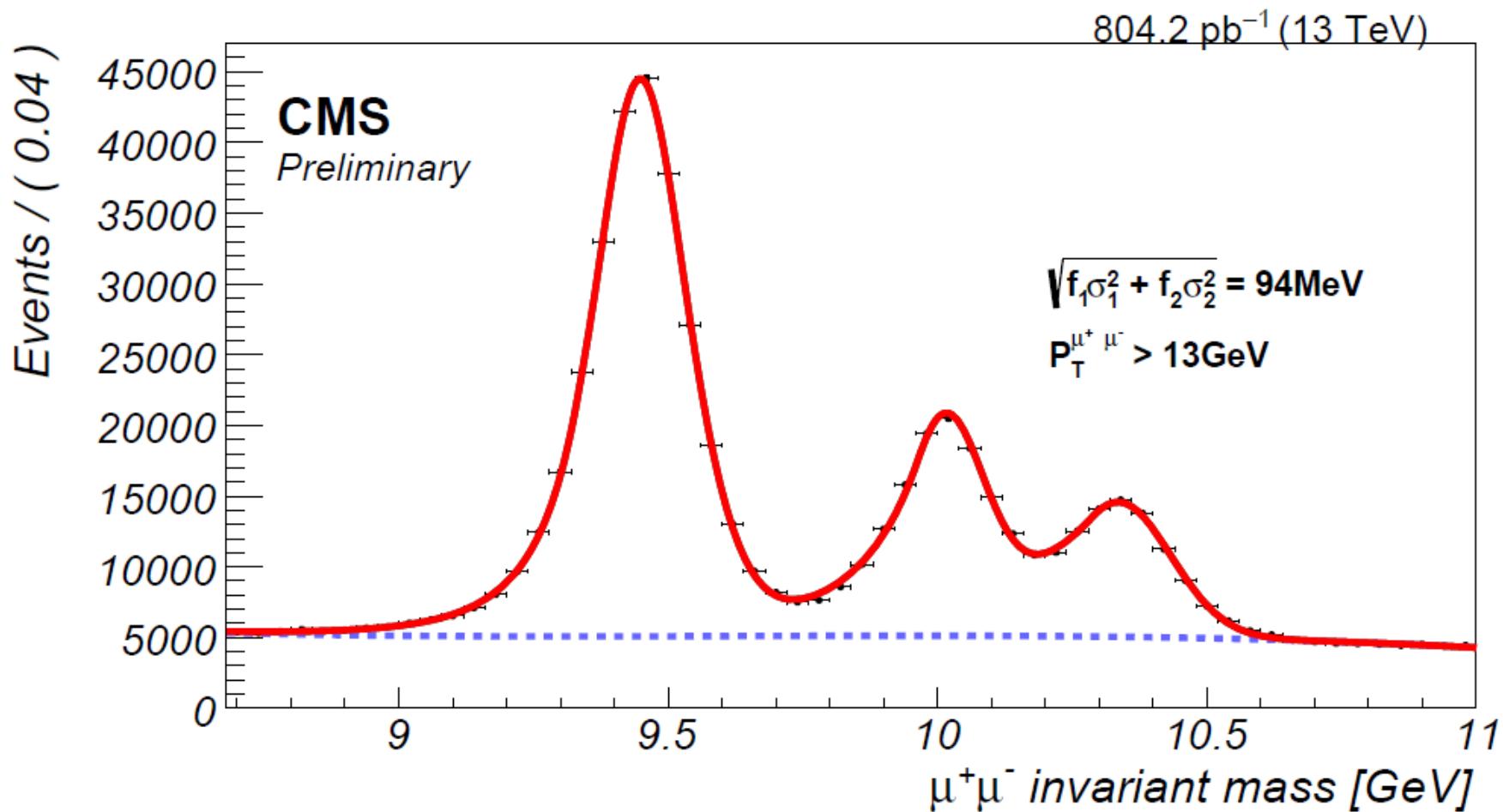
$\Upsilon(2S)$ Mass PDF: Crystal Ball

$\Upsilon(3S)$ Mass PDF: Crystal Ball

Background PDF: Chebychev polynomial series of order 2

- Quoted resolution: weighted quadrature sum of the two CB sigmas

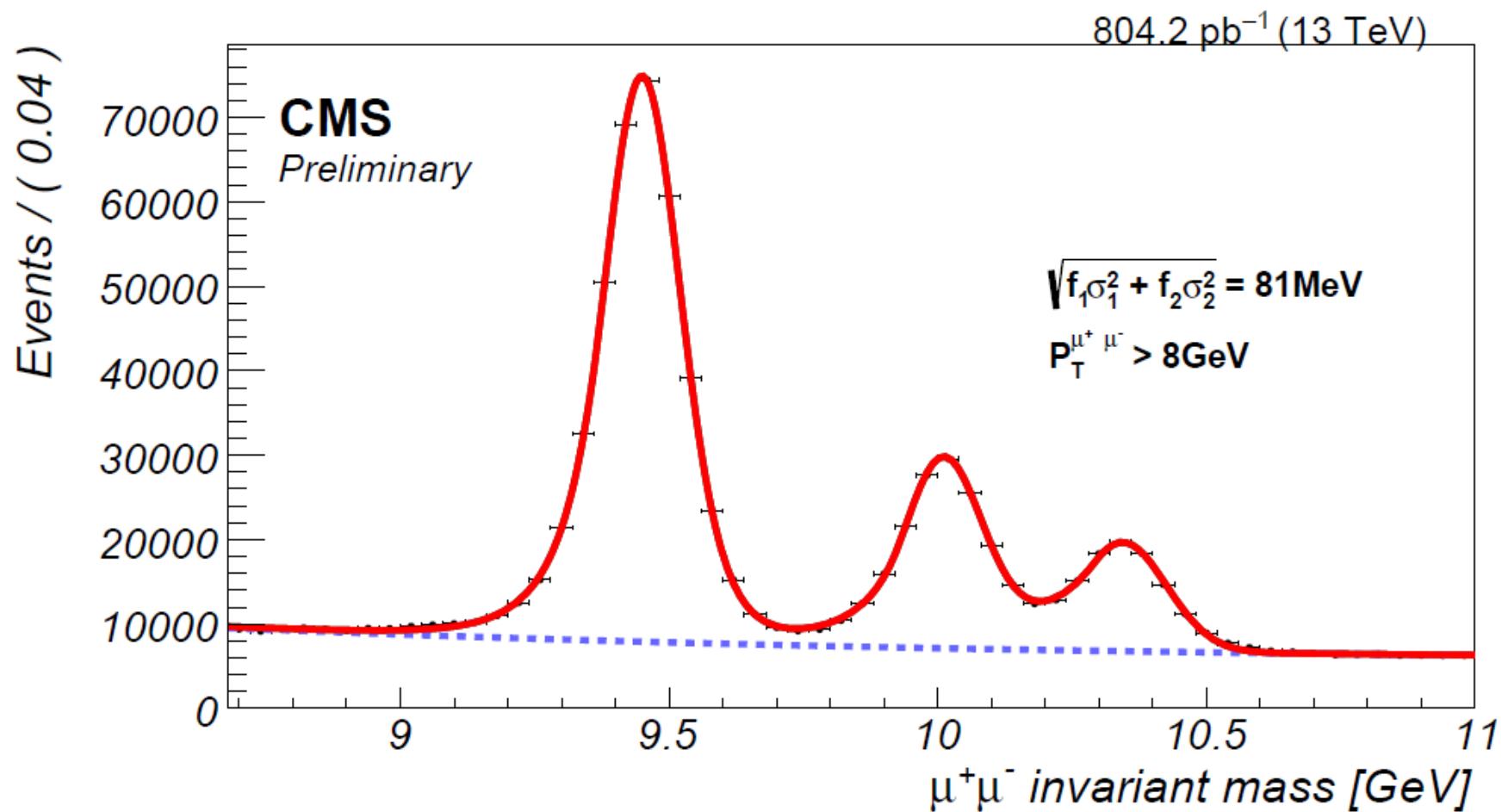
Dimuon invariant mass of $\Upsilon(nS)$



Dimuon invariant mass of Y(nS)

- Dataset: MuOnia – Prompt_v2
- Selection: 2 muons passing Soft ID
- Trigger: HLT_Dimuon 8_Upsilon_Barrel
- Fit Method
 - Y(1S) Mass PDF: double Crystal Ball with common mean, n and alpha parameters
 - Y(2S) Mass PDF: Crystal Ball
 - Y(3S) Mass PDF: Crystal Ball
 - Background PDF: Chebychev polynomial series of order 2
- Quoted resolution: weighted quadrature sum of the two CB sigmas

Dimuon invariant mass of $\Upsilon(nS)$



Thank you for your attention!