

Events per 0.025 GeV

Pb-Pb,  $\sqrt{s_{NN}} = 5.02$  TeV

$10 < p_T < 11$  GeV/c

centrality 40-50%

$2.5 < y < 4$

fitFuncCB2VWG\_pp13\_2.20\_4.50

$N_{J/\psi} = 167 \pm 17$

Mass =  $3.1021 \pm 0.0072$

$\sigma_{J/\psi} = 0.0615 \pm 0.0073$

$N_{\psi'} = 0 \pm 0$

$\chi^2/nDoF = 1.30$

$S/B = 4.00$

$S/\sqrt{S+B} = 1.77$

Fit Status = 0

Fit Validity : good

Fit Cov Matrix Status = 3

t1: 0.97

p1: 6.97

t2: 1.86

p1: 14.99

Background Normalization factor:  $11.976 \pm 16.868$

a1:  $2.222 \pm 0.006$

a2:  $0.008 \pm 0.025$

a3:  $1.384 \pm 0.650$

a4:  $-0.314 \pm 0.311$

—+— Raw events  
—+— Fitted  $J/\psi$  events  
—+— Fitted  $\psi(2S)$  events  
- - -+ - Fitted background events  
—+— Fitted  $J/\psi$   $\psi(2S)$  and background events

$m_{\mu\mu}$  (GeV/c<sup>2</sup>)

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fitFuncCB2VWG\_geant3\_2.20\_4.50

$N_{J/\psi} = 177 \pm 17$

Mass =  $3.0998 \pm 0.0071$

$\sigma_{J/\psi} = 0.0649 \pm 0.0079$

$N_{\psi'} = 0 \pm 0$

$\chi^2/nDoF = 1.28$

$S/B = 4.43$

$S/\sqrt{S+B} = 1.83$

Fit Status = 0

Fit Validity : good

Fit Cov Matrix Status = 3

t1: 1.11

p1: 4.30

t2: 1.82

p1: 2.98

Background Normalization factor:  $127.959 \pm 13.480$

a1:  $1.846 \pm 0.745$

a2:  $0.022 \pm 0.065$

a3:  $0.634 \pm 0.372$

a4:  $-0.020 \pm 0.087$

- +— Raw events
- +— Fitted  $J/\psi$  events
- +— Fitted  $\psi(2S)$  events
- - + - - Fitted background events
- +— Fitted  $J/\psi$   $\psi(2S)$  and background events

$m_{\mu\mu}$  (GeV/c<sup>2</sup>)

Events per 0.025 GeV

Pb-Pb,  $\sqrt{s_{NN}} = 5.02$  TeV

$10 < p_T < 11$  GeV/c

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$2.5 < y < 4$

fitFuncCB2VWG\_pp13\_2.40\_4.70

$N_{J/\psi} = 186 \pm 16$

Mass =  $3.0980 \pm 0.0077$

$\sigma_{J/\psi} = 0.0718 \pm 0.0082$

$N_{\psi'} = 0 \pm 0$

$\chi^2/nDoF = 1.37$

$S/B_{\pm 3\sigma} = 5.09$

$S/\sqrt{S+B} = 1.91$

Fit Status = 0

Fit Validity : good

Fit Cov Matrix Status = 2

t1: 0.97

p1: 6.97

t2: 1.86

p1: 14.99

Background Normalization factor:  $2.179 \pm 0.187$

a1:  $-0.095 \pm 0.006$

a2:  $3.052 \pm 16.524$

a3:  $9.998 \pm 19.662$

a4:  $0.315 \pm 0.019$

—+— Raw events  
—+— Fitted  $J/\psi$  events  
—+— Fitted  $\psi(2S)$  events  
- - -+ - Fitted background events  
—+— Fitted  $J/\psi$   $\psi(2S)$  and background events

$m_{\mu\mu}$  (GeV/c<sup>2</sup>)

Events per 0.025 GeV

Pb-Pb,  $\sqrt{s_{NN}} = 5.02$  TeV

$10 < p_T < 11$  GeV/c

centrality 40-50%

$2.5 < y < 4$

fitFuncCB2VWG\_geant3\_2.40\_4.70

$N_{J/\psi} = 179 \pm 18$

Mass =  $3.0997 \pm 0.0073$

$\sigma_{J/\psi} = 0.0653 \pm 0.0083$

$N_{\psi'} = 0 \pm 0$

$\chi^2/nDoF = 1.20$

$S/B_{\pm 3\sigma} = 4.61$

$S/\sqrt{S+B} = 1.84$

Fit Status = 0

Fit Validity : good

Fit Cov Matrix Status = 3

t1: 1.08

p1: 4.75

t2: 1.81

p1: 3.00

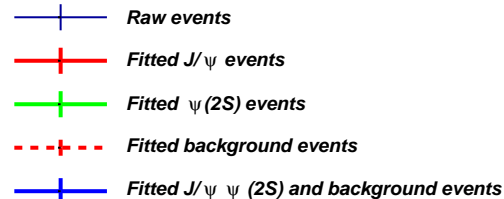
Background Normalization factor:  $139.509 \pm 138.840$

a1:  $2.340 \pm 0.166$

a2:  $0.003 \pm 0.008$

a3:  $0.820 \pm 0.122$

a4:  $-0.044 \pm 0.069$



$m_{\mu\mu}$  (GeV/c<sup>2</sup>)

















