

Events per 0.05 GeV

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

$15 < p_T < 20$  GeV/c

centrality 60-90%

$2.5 < y < 4$

fitFuncCB2VWG\_pp13\_2.20\_4.50

$N_{J/\psi} = 25 \pm 0$

Mass =  $3.1102 \pm 0.0161$

$\sigma_{J/\psi} = 0.0559 \pm 0.0148$

$N_{\psi'} = 3 \pm 0$

$\chi^2/nDoF = 0.49$

$S/B = 9.39$

$S/\sqrt{S+B} = 1.03$

Fit Status = 4

Fit Validity : bad

Fit Cov Matrix Status = 2

t1: 0.97

p1: 6.97

t2: 1.86

p1: 14.99

Background Normalization factor:  $49.910 \pm 46.725$

a1:  $10.000 \pm 10.208$

a2:  $2.449 \pm 0.406$

a3:  $5.315 \pm 0.525$

a4:  $7.191 \pm 0.592$

—+— 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

$N_{J/\psi} = 28 \pm 6$

Mass =  $3.1018 \pm 0.0164$

$\sigma_{J/\psi} = 0.0694 \pm 0.0156$

$N_{\psi'} = 3 \pm 3$

$\chi^2/nDoF = 0.40$

$S/B = 14.06$

$S/\sqrt{S+B} = 1.10$

Fit Status = 0

Fit Validity : good

Fit Cov Matrix Status = 3

t1: 1.40

p1: 3.08

t2: 2.08

p1: 1.52

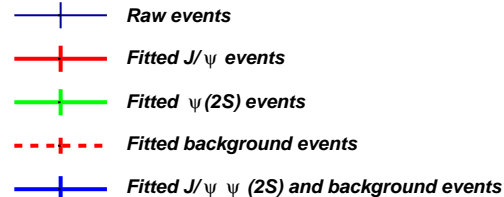
Background Normalization factor:  $100.000 \pm 53.363$

a1:  $2.250 \pm 0.000$

a2:  $0.000 \pm 0.000$

a3:  $0.637 \pm 0.049$

a4:  $0.013 \pm 0.070$



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

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$2.5 < y < 4$

fitFuncCB2VWG\_pp13\_2.40\_4.70

$N_{J/\psi} = 25 \pm 6$

Mass =  $3.1089 \pm 0.0164$

$\sigma_{J/\psi} = 0.0545 \pm 0.0170$

$N_{\psi'} = 2 \pm 3$

$\chi^2/nDoF = 0.39$

$S/B_{\pm 3\sigma} = 9.71$

$S/\sqrt{S+B} = 1.03$

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:  $0.401 \pm 0.261$

a1:  $3.698 \pm 1.041$

a2:  $1.192 \pm 1.243$

a3:  $-2.785 \pm 8.030$

a4:  $-5.000 \pm 8.587$

—+— 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 0.05 GeV

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

$15 < p_T < 20$  GeV/c

centrality 60-90%

$2.5 < y < 4$

fitFuncCB2VWG\_geant3\_2.40\_4.70

$N_{J/\psi} = 26 \pm 6$

Mass =  $3.1025 \pm 0.0159$

$\sigma_{J/\psi} = 0.0639 \pm 0.0157$

$N_{\psi'} = 2 \pm 3$

$\chi^2/nDoF = 0.39$

$S/B_{\pm 3\sigma} = 9.61$

$S/\sqrt{S+B} = 1.05$

Fit Status = 0

Fit Validity : good

Fit Cov Matrix Status = 3

t1: 1.39

p1: 3.13

t2: 2.10

p1: 1.47

Background Normalization factor:  $0.334 \pm 0.162$

a1:  $2.634 \pm 0.382$

a2:  $1.536 \pm 3.050$

a3:  $16.757 \pm 14.183$

a4:  $-25.246 \pm 23.832$

—+— 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>)

















