

PbPb 351  $\mu\text{b}^{-1}$  $\sqrt{s_{\text{NN}}} = 5.02 \text{ TeV}$ 

2015 HI Soft Muon ID

 $l_{J/\psi}$  cuts applied

HLT\_HIL1DoubleMu0\_v1

Cent. 0-100%

 $3.0 \leq p_{\text{T}}^{\mu\mu} < 30.0 \text{ GeV}/c$  $1.6 \leq |y^{\mu\mu}| < 2.4$ 

● Data

— Total fit

- - - Background

**CMS***Preliminary*

$$N_{\text{bkg}}^{\text{r}\omega\text{Pb}} = 127897 \pm 433$$

$$N_{J/\psi}^{\text{PbPb}} = 18358 \pm 223$$

$$R_{\psi(2S)/J/\psi}^{\text{PbPb}} = 0.0110 \pm 0.0071$$

$$\alpha_{J/\psi}^{\text{PbPb}} = 2.0200 \pm 0.0000$$

$$f_{J/\psi}^{\text{PbPb}} = 0.6973 \pm 0.1655$$

$$\lambda_1^{\text{PbPb}} = -0.0201 \pm 0.0050$$

$$\lambda_2^{\text{PbPb}} = -0.0884 \pm 0.0056$$

$$m_{J/\psi}^{\text{PbPb}} = 3.08806 \pm 0.00059 \text{ GeV}/c^2$$

$$n_{J/\psi}^{\text{PbPb}} = 1.8400 \pm 0.0000$$

$$(\sigma_2/\sigma_1)^{\text{PbPb}} = 1.520 \pm 0.000$$

$$\sigma_1^{\text{PbPb}} = 43.76 \pm 3.05 \text{ MeV}/c^2$$

 $10^4$ 