

pp  $L_{\text{int}} = 26 \text{ pb}^{-1}$

$\sqrt{s} = 5.02 \text{ TeV}$

Events / (0.1 GeV/c<sup>2</sup>)

$p_{\text{T}}^{\mu\mu} < 30 \text{ GeV}/c$   
 $1.2 < |y^{\mu\mu}| < 2.4$   
 $p_{\text{T}}^{\mu} > 4 \text{ GeV}/c$

**CMS**

*Preliminary*

$$N_{\gamma(1S)} = 14433 \pm 161$$

$$R_{\frac{2S}{1S}} = 0.3250 \pm 0.0083$$

$$R_{\frac{3S}{1S}} = 0.1686 \pm 0.0071$$

$$a1\_bkg = -0.12486 \pm 0.0092$$

$$a2\_Bkg = -0.3148 \pm 0.010$$

$$a3\_Bkg = 0.151 \pm 0.010$$

$$a4\_Bkg = -0.04314 \pm 0.0089$$

$$m_{\gamma(1S)} = 9.4417 \pm 0.0015$$

$$n_{\text{Bkgd}} = 43400 \pm 282$$

Pull

$\chi^2/\text{ndf} = 54.9/50$

$m_{\mu\mu} \text{ (GeV}/c^2\text{)}$

