Supplementary material for LHCb-PAPER-2017-036

This document contains supplementary material that will be posted on the public CDS record but will not appear in the paper.

The measurements and the averages of the $\chi_{c1}$ mass, the $\chi_{c2}$ mass and the $\chi_{c2}$ natural width are summarized in Figs. 1, 2 and 3, respectively. Averages made according to the PDG prescription [1]. The measurements are ordered according to decreasing total uncertainty. The names of the collaborations follow the convention of the PDG.

Figure 1: Measurements of the $\chi_{c1}$ mass [2-14].
Figure 2: Measurements of the $\chi^2$ mass [2–16].

Figure 3: Measurements of the $\chi^2$ natural width [10, 11, 13, 14].
References


[2] DASP collaboration, R. Brandelik et al., *Experimental results on the decay sequences* $\psi'(3685) \rightarrow \gamma P_c/\chi \rightarrow \gamma\gamma J/\psi, \gamma\pi^+\pi^-, \gamma K^+K^-$ and the decays $\psi' \rightarrow \eta J/\psi, \pi^0 J/\psi$, Nucl. Phys. B160 (1979) 426.


[7] E865 collaboration, M. Andreotti et al., *Measurement of the resonance parameters of the $\chi_1(1^3P_1)$ and $\chi_2(1^3P_2)$ states of charmonium formed in p$\bar{p}$ annihilations*, Nucl. Phys. B373 (1992) 35.
