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Erratum: Search for B decays to final states with the η_c meson

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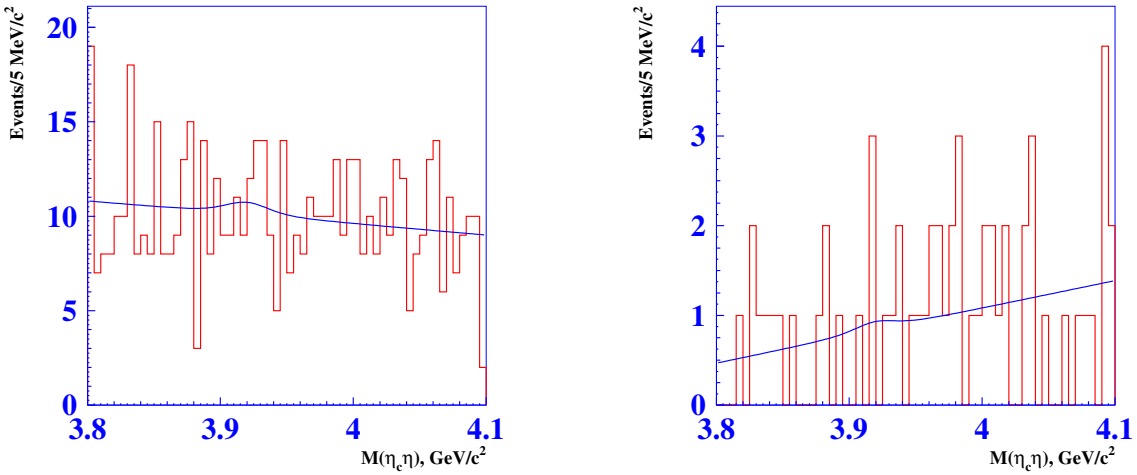

Figure 1. Corrected figure 10. The combined fit projections of the $\eta_c\eta$ invariant mass distributions in case of the $\eta \to \gamma\gamma$ (left) and $\eta \to \pi^+\pi^-\pi^0$ (right) modes corresponding to the search for the $X(3915)$ resonance.

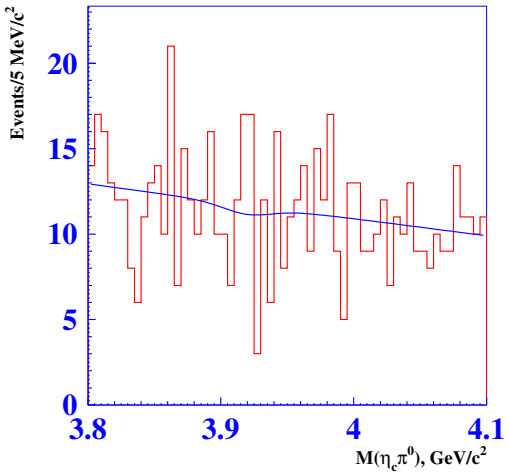

Figure 2. Corrected figure 11. The $\eta_c\pi^0$ invariant mass distribution corresponding to the search for the $X(3915)$ resonance.

We have found an error in the fit of the $\eta_c\eta$ and $\eta_c\pi^0$ invariant masses that is used to search for the $X(3915)$ state. The corrected fits are shown in figures 1 and 2. The resonance parameters are fixed to the world average values ($3918\,\mathrm{MeV}/c^2$ and $20\,\mathrm{MeV}/c^2$ for mass and width correspondingly).

The fit results are summarized in table 1.

Changes in the fits of the $X(3915)$ resonance lead to changes of the corresponding upper limits. The corrected upper limits on the $X(3915)$ production and decay branching fraction products are summarized in table 2. All other results of the paper are correct.

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Decay mode	Fitting function	Efficiency, %	Yield
$X(3915) \to \eta_c\eta$,			
$\eta \to \gamma\gamma$	(3.12)	6.60 ± 0.02	7.1 ± 14.5
$\eta \to \pi^+\pi^-\pi^0$		1.64 ± 0.01	1.0 ± 2.1
$X(3915) \to \eta_c\pi^0$	(3.11)	6.88 ± 0.02	-6.9 ± 17.3

Table 1. Corrected table 3. Fit results for the $X(3915)$ resonance.

Resonance	Decay mode	Upper limit (90% C.L.)
$X(3915)$	$\eta_c\eta$	4.7×10^{-5}
	$\eta_c\pi^0$	1.7×10^{-5}

Table 2. Corrected entry of table 8. Results of branching fraction measurements for the B decays containing intermediate $X(3915)$.

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