

Erratum to "Odd and Even Partial Waves of $\eta\pi^-$ and $\eta'\pi^-$ in $\pi^-p \rightarrow \eta^{(\prime)}\pi^-p$ at 191 GeV/c" [Phys. Lett. B 740 (2015) 303]

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Abstract

In Fig. 5 on p. 311 of our Phys. Lett. B 740 (2015) 303 an adjustment by 180° is required for the phases with respect to the $L = 2, M = 1$ wave, of the following waves: $L = 1, 3, 5$ with $M = 1$, and $L = 2$ with $M = 2$. After this correction (Fig. 5 (corrected) below), the extracted partial waves describe the angular distribution of the $\eta^{(\prime)}$ in the Gottfried-Jackson (GJ) frame, using Eq. (4) with implicit Condon-Shortley phase convention. The other results of our paper are not affected. The right-handed GJ coordinate system was defined by the z -axis pointing in the direction of the beam in the $\eta^{(\prime)}\pi^-$ center-of-mass system and the y -axis pointing in the direction of $\mathbf{p}_{\text{recoil}}^{\text{GJ}} \times \mathbf{p}_{\text{beam}}^{\text{GJ}}$.

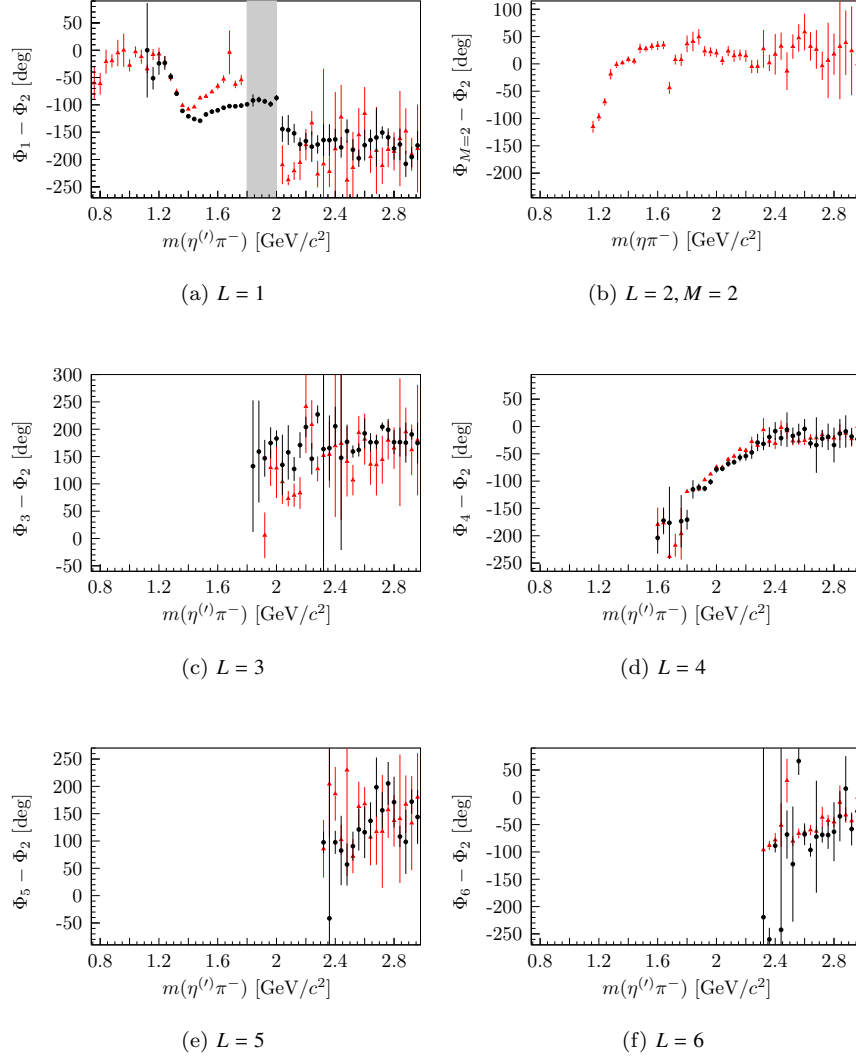


Figure 5 (corrected): Phases Φ_L of the $M = 1$ partial waves with angular momentum L relative to the $L = 2, M = 1$ wave of $\eta\pi^-$ (triangles, red) and $\eta'\pi^-$ (circles, black) systems. For $\eta\pi^-$, the phase between the P and D -waves is ill-defined in the region of vanishing P -wave intensity between 1.8 and 2.05 GeV/c^2 (shaded). Panel (b) shows the relative $M = 2$ versus $M = 1$ phase of the $\eta\pi^-$ D -wave.