

Erratum: Direct CP violation in two-body hadronic charmed meson decays [Phys. Rev. D **85**, 034036 (2012)]

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In Table I, the experimental branching fraction of $D^0 \rightarrow K^0 \bar{K}^0$ should read $(0.346 \pm 0.058) \times 10^{-3}$ instead of $(0.692 \pm 0.116) \times 10^{-3}$. Eq. (19) should read

$$\begin{aligned} \mathcal{P}_4^p &= \frac{C_F \alpha_s}{4\pi N_c} \left\{ c_1 \left[\frac{4}{3} \ln \frac{m_c}{\mu} + \frac{2}{3} - G_{M_2}(s_p) \right] + c_3 \left[\frac{8}{3} \ln \frac{m_c}{\mu} + \frac{4}{3} - G_{M_2}(s_u) - G_{M_2}(1) \right] \right. \\ &\quad \left. + (c_4 + c_6) \left[\frac{16}{3} \ln \frac{m_c}{\mu} - G_{M_2}(s_u) - G_{M_2}(s_d) - G_{M_2}(s_s) - G_{M_2}(1) \right] - 2c_{8g}^{\text{eff}} \int_0^1 \frac{dx}{1-x} \Phi_{M_2}(x) \right\}, \\ \mathcal{P}_6^p &= \frac{C_F \alpha_s}{4\pi N_c} \left\{ c_1 \left[\frac{4}{3} \ln \frac{m_c}{\mu} + \frac{2}{3} - \hat{G}_{M_2}(s_p) \right] + c_3 \left[\frac{8}{3} \ln \frac{m_c}{\mu} + \frac{4}{3} - \hat{G}_{M_2}(s_u) - \hat{G}_{M_2}(1) \right] \right. \\ &\quad \left. + (c_4 + c_6) \left[\frac{16}{3} \ln \frac{m_c}{\mu} - \hat{G}_{M_2}(s_u) - \hat{G}_{M_2}(s_d) - \hat{G}_{M_2}(s_s) - \hat{G}_{M_2}(1) \right] - 2c_{8g}^{\text{eff}} \right\}, \end{aligned}$$

where $c_{8g}^{\text{eff}} = c_{8g} + c_5$. After including chromomagnetic dipole operator contributions to the penguin amplitudes, Table III should read

Decay Mode	$a_{\text{dir}}^{(\text{tree})}$	$a_{\text{dir}}^{(t+p)}$	$a_{\text{dir}}^{(t+pa)}$	$a_{\text{dir}}^{(\text{tot})}$	Expt(10^{-3})	Decay Mode	$a_{\text{dir}}^{(\text{tree})}$	$a_{\text{dir}}^{(t+p)}$	$a_{\text{dir}}^{(t+pa)}$	$a_{\text{dir}}^{(\text{tot})}$
$D^0 \rightarrow \pi^+ \pi^-$	0	-0.04	0.91	0.87	2.0 ± 2.2	$D^0 \rightarrow \pi^+ \rho^-$	0	0.09	-0.60	-0.51
$D^0 \rightarrow \pi^0 \pi^0$	0	0.27	0.59	0.87	1 ± 48	$D^0 \rightarrow \pi^- \rho^+$	0	-0.05	-0.22	-0.28
$D^0 \rightarrow \pi^0 \eta$	0.63	0.36	0.03	-0.22		$D^0 \rightarrow \pi^0 \rho^0$	0	-0.01	-0.74	-0.76
$D^0 \rightarrow \pi^0 \eta'$	-0.51	-0.63	0.09	-0.04		$D^0 \rightarrow K^+ K^{*-}$	0	-0.09	0.60	0.51
$D^0 \rightarrow \eta \eta$	-0.37	-0.40	-0.70	-0.73		$D^0 \rightarrow K^- K^{*+}$	0	0.07	0.22	0.29
$D^0 \rightarrow \eta \eta'$	0.39	0.55	0.21	0.36		$D^0 \rightarrow K^0 \bar{K}^{*0}$	0.73	0.73	0.73	0.73
$D^0 \rightarrow K^+ K^-$	0	0.02	-0.50	-0.49	-2.3 ± 1.7	$D^0 \rightarrow \bar{K}^0 K^{*0}$	-0.73	-0.73	-0.73	-0.73
$D^+ \rightarrow \pi^+ \pi^0$	0	0	0	0		$D^0 \rightarrow \pi^0 \omega$	0	-0.07	0.53	0.44
$D^+ \rightarrow \pi^+ \eta$	0.37	0.25	-0.56	-0.68	17.4 ± 11.5^a	$D^0 \rightarrow \pi^0 \phi$	0	0	0	0
$D^+ \rightarrow \pi^+ \eta'$	-0.21	-0.26	0.42	0.41	-1.2 ± 11.3^a	$D^0 \rightarrow \eta \omega$	0.19	0.19	0.50	0.50
$D^+ \rightarrow K^+ \bar{K}^0$	-0.07	0.09	-0.53	-0.38	-1.0 ± 5.9	$D^0 \rightarrow \eta' \omega$	-1.07	-1.04	-0.91	-0.88
$D_s^+ \rightarrow \pi^+ K^0$	0.09	-0.07	0.69	0.52	66 ± 24	$D^0 \rightarrow \eta \phi$	0	0	0	0
$D_s^+ \rightarrow \pi^0 K^+$	0.01	0.03	0.87	0.88	266 ± 228	$D^0 \rightarrow \eta \rho^0$	-0.53	-0.56	-0.22	-0.25
$D_s^+ \rightarrow K^+ \eta$	-0.61	-0.54	-0.53	-0.46	93 ± 152	$D^0 \rightarrow \eta' \rho^0$	0.59	0.58	0.21	0.20
$D_s^+ \rightarrow K^+ \eta'$	0.35	0.52	-0.63	-0.47	60 ± 189					

^aData from [47].