

$D_0^*(2300)^\pm$

$$I(J^P) = \frac{1}{2}(0^+)$$

OMITTED FROM SUMMARY TABLE

was $D_0^*(2400)^\pm$ J, P need confirmation. $D_0^*(2300)^\pm$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
2349 ± 7 OUR AVERAGE				
2360 ± 15 ± 30		¹ AAIJ	15X LHCb	$B^0 \rightarrow \bar{D}^0 K^+ \pi^-$
2349 ± 6 ± 4		² AAIJ	15Y LHCb	$B^0 \rightarrow \bar{D}^0 \pi^+ \pi^-$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
2354 ± 7 ± 11		³ AAIJ	15Y LHCb	$B^0 \rightarrow \bar{D}^0 \pi^+ \pi^-$
2403 ± 14 ± 35	18.8k	⁴ LINK	04A FOCS	γA

¹ From the Dalitz plot analysis including various K^* and D^{**} mesons as well as broad structures in the $K\pi$ S -wave and the $D\pi$ S - and P -waves.² Modeling the $\pi^+\pi^-$ S -wave with the Isobar formalism.³ Modeling the $\pi^+\pi^-$ S -wave with the K-matrix formalism.⁴ Possibly the feed-down from another state. $D_0^*(2300)^\pm$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
221 ± 18 OUR AVERAGE				
255 ± 26 ± 51		¹ AAIJ	15X LHCb	$B^0 \rightarrow \bar{D}^0 K^+ \pi^-$
217 ± 13 ± 13		² AAIJ	15Y LHCb	$B^0 \rightarrow \bar{D}^0 \pi^+ \pi^-$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
230 ± 15 ± 21		³ AAIJ	15Y LHCb	$B^0 \rightarrow \bar{D}^0 \pi^+ \pi^-$
283 ± 24 ± 34	18.8k	⁴ LINK	04A FOCS	γA

¹ From the Dalitz plot analysis including various K^* and D^{**} mesons as well as broad structures in the $K\pi$ S -wave and the $D\pi$ S - and P -waves.² Modeling the $\pi^+\pi^-$ S -wave with the Isobar formalism.³ Modeling the $\pi^+\pi^-$ S -wave with the K-matrix formalism.⁴ Possibly the feed-down from another state. $D_0^*(2300)^\pm$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \quad D^0 \pi^+$	seen

 $D_0^*(2300)^\pm$ REFERENCES

AAIJ	15X	PR D92 012012	R. Aaij <i>et al.</i>	(LHCb Collab.)
AAIJ	15Y	PR D92 032002	R. Aaij <i>et al.</i>	(LHCb Collab.)
LINK	04A	PL B586 11	J.M. Link <i>et al.</i>	(FOCUS Collab.)