



$$I(J^P) = \frac{1}{2}(\frac{1}{2}^+) \text{ Status: } ****$$

Neither  $J$  or  $P$  has actually been measured.

### $\Xi_c^0$ MASS

The fit uses the  $\Xi_c^0$  and  $\Xi_c^+$  mass and mass-difference measurements.

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>2470.44 ± 0.28 OUR FIT</b>				Error includes scale factor of 1.2.

#### **2470.99<sup>+0.30</sup><sub>-0.50</sub> OUR AVERAGE**

2470.85 ± 0.24 ± 0.55	3.4k	AALTONEN	14B	CDF	$p\bar{p}$ at 1.96 TeV
2471.0 ± 0.3 <sup>+0.2</sup> <sub>-1.4</sub>	8.6k	<sup>1</sup> LESIAK	05	BELL	$e^+e^-$ , $\Upsilon(4S)$
2470.0 ± 2.8 ± 2.6	85	FRABETTI	98B	E687	$\gamma$ Be, $\bar{E}_\gamma = 220$ GeV
2469 ± 2 ± 3	9	HENDERSON	92B	CLEO	$\Omega^- K^+$
2472.1 ± 2.7 ± 1.6	54	ALBRECHT	90F	ARG	$e^+e^-$ at $\Upsilon(4S)$
2473.3 ± 1.9 ± 1.2	4	BARLAG	90	ACCM	$\pi^- (K^-)$ Cu 230 GeV
2472 ± 3 ± 4	19	ALAM	89	CLEO	$e^+e^-$ 10.6 GeV

• • • We do not use the following data for averages, fits, limits, etc. • • •

2462.1 ± 3.1 ± 1.4	42	<sup>2</sup> FRABETTI	93C	E687	See FRABETTI 98B
2471 ± 3 ± 4	14	AVERY	89	CLEO	See ALAM 89

<sup>1</sup> The systematic error was (wrongly) given the other way round in LESIAK 05.

<sup>2</sup> The FRABETTI 93C mass is well below the other measurements.

### $\Xi_c^0 - \Xi_c^+$ MASS DIFFERENCE

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>2.72 ± 0.23 OUR FIT</b>				Error includes scale factor of 1.1.

#### **2.91 ± 0.26 OUR AVERAGE**

2.85 ± 0.30 ± 0.04	5.1/3.4k	AALTONEN	14B	CDF	$p\bar{p}$ at 1.96 TeV
2.9 ± 0.5		LESLIAK	05	BELL	$e^+e^-$ , $\Upsilon(4S)$
7.0 ± 4.5 ± 2.2		ALBRECHT	90F	ARG	$e^+e^-$ at $\Upsilon(4S)$
6.8 ± 3.3 ± 0.5		BARLAG	90	ACCM	$\pi^- (K^-)$ Cu 230 GeV
5 ± 4 ± 1		ALAM	89	CLEO	$\Xi_c^0 \rightarrow \Xi^- \pi^+$ , $\Xi_c^+ \rightarrow \Xi^- \pi^+ \pi^+$

### $\Xi_c^0$ MEAN LIFE

VALUE ( $10^{-15}$ s)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>150.4 ± 2.8 OUR AVERAGE</b>				Error includes scale factor of 1.4.

148.0 ± 2.3 ± 2.2		<sup>1</sup> AAIJ	22Y	LHCB	$pp \rightarrow \Xi_c^0 + X$ , $\Xi_c^0 \rightarrow pK^- K^- \pi^+$
153.4 ± 2.4 ± 0.7	22k	<sup>2,3</sup> AAIJ	19AG	LHCB	$\Xi_b^- \rightarrow \Xi_c^0 \mu^- \bar{\nu}_\mu + X$ , $\Xi_c^0 \rightarrow pK^- K^- \pi^+$

118	$+14$ $-12$	$\pm 5$	110	LINK	02H FOCS	$\gamma$ nucleus, $\approx 180$ GeV
101	$+25$ $-17$	$\pm 5$	42	FRABETTI	93C E687	$\gamma$ Be, $\bar{E}_\gamma = 220$ GeV
82	$+59$ $-30$		4	BARLAG	90 ACCM	$\pi^-$ ( $K^-$ ) Cu 230 GeV

<sup>1</sup> Measured in  $\Xi_c^0$  produced promptly in  $pp$  collisions, using  $D^0 \rightarrow K^+ K^- \pi^+ \pi^-$  as normalisation mode. AAIJ 22Y reports this lifetime value as  $(148.0 \pm 2.3 \pm 2.2 \pm 0.2) \times 10^{-15}$  s where the last uncertainty is due to the uncertainty on the  $D^0$  lifetime value from PDG 20 average,  $\tau_{D^0} = (410.1 \pm 1.5)$  fs.

<sup>2</sup> AAIJ 19AG reports  $[\Xi_c^0 \text{ MEAN LIFE}] / [D^\pm \text{ MEAN LIFE}] = 0.1485 \pm 0.0017 \pm 0.0016$  which we multiply by our best value  $D^\pm \text{ MEAN LIFE} = (1.033 \pm 0.005) \times 10^{-12}$  s. Our first error is their experiment's error and our second error is the systematic error from using our best value.

<sup>3</sup> Measured in  $\Xi_c^0$  produced in semileptonic  $\Xi_b^-$  decays.

### $\Xi_c^0$ DECAY MODES

Mode	Fraction ( $\Gamma_i/\Gamma$ )	Confidence level
<b>Cabibbo-favored decays</b>		
$\Gamma_1$ $pK^- K^- \pi^+$	$(4.9 \pm 1.0) \times 10^{-3}$	
$\Gamma_2$ $pK^- \bar{K}^*(892)^0, \bar{K}^{*0} \rightarrow K^- \pi^+$	$(2.0 \pm 0.6) \times 10^{-3}$	
$\Gamma_3$ $pK^- K^- \pi^+$ (no $\bar{K}^{*0}$ )	$(3.0 \pm 0.8) \times 10^{-3}$	
$\Gamma_4$ $\Lambda K_S^0$	$(3.2 \pm 0.6) \times 10^{-3}$	
$\Gamma_5$ $\Lambda K^- \pi^+$	$(1.45 \pm 0.28) \%$	
$\Gamma_6$ $\Lambda \bar{K}^*(892)^0$	$(2.6 \pm 0.6) \times 10^{-3}$	
$\Gamma_7$ $\Lambda \bar{K}^0 \pi^+ \pi^-$	seen	
$\Gamma_8$ $\Lambda K^- \pi^+ \pi^+ \pi^-$	seen	
$\Gamma_9$ $\Sigma^0 K_S^0$	$(5.4 \pm 1.4) \times 10^{-4}$	
$\Gamma_{10}$ $\Sigma^+ K^-$	$(1.8 \pm 0.4) \times 10^{-3}$	
$\Gamma_{11}$ $\Sigma^0 \bar{K}^*(892)^0$	$(9.9 \pm 1.9) \times 10^{-3}$	
$\Gamma_{12}$ $\Sigma^+ K^*(892)^-$	$(4.9 \pm 1.3) \times 10^{-3}$	
$\Gamma_{13}$ $\Xi^- \pi^+$	$(1.43 \pm 0.27) \%$	
$\Gamma_{14}$ $\Xi^- \pi^+ \pi^+ \pi^-$	$(4.8 \pm 2.3) \%$	
$\Gamma_{15}$ $\Xi^0 K^+ K^-$		
$\Gamma_{16}$ $\Xi^0 \phi, \phi \rightarrow K^+ K^-$	$(5.2 \pm 1.2) \times 10^{-4}$	
$\Gamma_{17}$ $\Xi^0 K^+ K^-$ nonresonant	$(5.6 \pm 1.2) \times 10^{-4}$	
$\Gamma_{18}$ $\Omega^- K^+$	$(4.2 \pm 0.9) \times 10^{-3}$	
$\Gamma_{19}$ $\Xi^- e^+ \nu_e$	$(1.05 \pm 0.20) \%$	
$\Gamma_{20}$ $\Xi^- \mu^+ \nu_\mu$	$(1.01 \pm 0.21) \%$	
$\Gamma_{21}$ $\Xi^0 \gamma$	$< 1.7 \times 10^{-4}$	90%

### Cabibbo-suppressed decays

$\Gamma_{22}$	$\Lambda_c^+ \pi^-$	$(5.5 \pm 1.1) \times 10^{-3}$
$\Gamma_{23}$	$\Xi^- K^+$	$(3.9 \pm 1.1) \times 10^{-4}$
$\Gamma_{24}$	$\Lambda K^+ K^-$ (no $\phi$ )	$(4.1 \pm 1.3) \times 10^{-4}$
$\Gamma_{25}$	$\Lambda \phi$	$(4.9 \pm 1.3) \times 10^{-4}$

### FIT INFORMATION

An overall fit to 7 branching ratios uses 8 measurements to determine 4 parameters. The overall fit has a  $\chi^2 = 1.4$  for 4 degrees of freedom.

The following *off-diagonal* array elements are the correlation coefficients  $\langle \delta x_i \delta x_j \rangle / (\delta x_i \delta x_j)$ , in percent, from the fit to the branching fractions,  $x_i \equiv \Gamma_i / \Gamma_{\text{total}}$ .

$x_5$	64		
$x_{13}$	86	74	
$x_{22}$	64	55	75
	$x_1$	$x_5$	$x_{13}$

### $\Xi_c^0$ BRANCHING RATIOS

———— Cabibbo-favored ( $S = -2$ ) decays ————

$\Gamma(pK^- K^- \pi^+) / \Gamma_{\text{total}}$					$\Gamma_1 / \Gamma$
VALUE (%)	EVTS	DOCUMENT ID	TECN	COMMENT	
<b>0.49 ± 0.10 OUR FIT</b>					
<b>0.58 ± 0.23 ± 0.05</b>	17 ± 5	LI	19A	BELL $e^+ e^-$ at $\Upsilon(4S)$	

$\Gamma(pK^- K^- \pi^+) / \Gamma(\Xi^- \pi^+)$					$\Gamma_1 / \Gamma_{13}$
VALUE	EVTS	DOCUMENT ID	TECN	COMMENT	
<b>0.339 ± 0.035 OUR FIT</b>					
<b>0.34 ± 0.04 OUR AVERAGE</b>					
0.33 ± 0.03 ± 0.03	1908 ± 62	LESLIAK	05	BELL $e^+ e^-$ , $\Upsilon(4S)$	
0.35 ± 0.06 ± 0.03	148 ± 18	DANKO	04	CLEO $e^+ e^-$	

$\Gamma(pK^- \bar{K}^*(892)^0, \bar{K}^{*0} \rightarrow K^- \pi^+) / \Gamma(\Xi^- \pi^+)$					$\Gamma_2 / \Gamma_{13}$
VALUE		DOCUMENT ID	TECN	COMMENT	
<b>0.14 ± 0.03 ± 0.01</b>		DANKO	04	CLEO $e^+ e^-$	

$\Gamma(pK^- K^- \pi^+ (\text{no } \bar{K}^{*0})) / \Gamma(\Xi^- \pi^+)$					$\Gamma_3 / \Gamma_{13}$
VALUE		DOCUMENT ID	TECN	COMMENT	
<b>0.21 ± 0.04 ± 0.02</b>		DANKO	04	CLEO $e^+ e^-$	

$\Gamma(\Lambda K_S^0)/\Gamma(\Xi^- \pi^+)$					$\Gamma_4/\Gamma_{13}$
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
<b>0.225±0.013 OUR AVERAGE</b>					
0.229±0.008±0.012	5.6k	LI	21F	BELL	$e^+ e^-$ at $\Upsilon(nS)$
0.21 ±0.02 ±0.02	465 ± 37	LESLIAK	05	BELL	$e^+ e^-$ , $\Upsilon(4S)$
$\Gamma(\Lambda K^- \pi^+)/\Gamma_{\text{total}}$					$\Gamma_5/\Gamma$
<u>VALUE (%)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
<b>1.45±0.28 OUR FIT</b>					
<b>1.17±0.37±0.09</b>	24 ± 6	LI	19A	BELL	$e^+ e^-$ at $\Upsilon(4S)$
$\Gamma(\Lambda K^- \pi^+)/\Gamma(\Xi^- \pi^+)$					$\Gamma_5/\Gamma_{13}$
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
<b>1.02±0.14 OUR FIT</b> Error includes scale factor of 1.1.					
<b>1.07±0.12±0.07</b>	2979 ± 211	LESLIAK	05	BELL	$e^+ e^-$ , $\Upsilon(4S)$
$\Gamma(\Lambda \bar{K}^*(892)^0)/\Gamma(\Xi^- \pi^+)$					$\Gamma_6/\Gamma_{13}$
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
<b>0.18±0.02±0.01</b>	4k	JIA	21	BELL	$e^+ e^-$ at $\Upsilon(nS)$
$\Gamma(\Lambda \bar{K}^0 \pi^+ \pi^-)/\Gamma_{\text{total}}$					$\Gamma_7/\Gamma$
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
<b>seen</b>		FRABETTI	98B	E687	$\gamma$ Be, $\bar{E}_\gamma = 220$ GeV
$\Gamma(\Lambda K^- \pi^+ \pi^+ \pi^-)/\Gamma_{\text{total}}$					$\Gamma_8/\Gamma$
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
<b>seen</b>		FRABETTI	98B	E687	$\gamma$ Be, $\bar{E}_\gamma = 220$ GeV
$\Gamma(\Sigma^0 K_S^0)/\Gamma(\Xi^- \pi^+)$					$\Gamma_9/\Gamma_{13}$
<u>VALUE (units 10<sup>-2</sup>)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
<b>3.8±0.6±0.4</b>	279	LI	21F	BELL	$e^+ e^-$ at $\Upsilon(nS)$
$\Gamma(\Sigma^+ K^-)/\Gamma(\Xi^- \pi^+)$					$\Gamma_{10}/\Gamma_{13}$
<u>VALUE (units 10<sup>-2</sup>)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
<b>12.3±0.7±1.0</b>	889	LI	21F	BELL	$e^+ e^-$ at $\Upsilon(nS)$
$\Gamma(\Sigma^0 \bar{K}^*(892)^0)/\Gamma(\Xi^- \pi^+)$					$\Gamma_{11}/\Gamma_{13}$
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
<b>0.69±0.03±0.03</b>	6.3k	JIA	21	BELL	$e^+ e^-$ at $\Upsilon(nS)$
$\Gamma(\Sigma^+ K^*(892)^-)/\Gamma(\Xi^- \pi^+)$					$\Gamma_{12}/\Gamma_{13}$
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
<b>0.34±0.06±0.02</b>	373	JIA	21	BELL	$e^+ e^-$ at $\Upsilon(nS)$
$\Gamma(\Xi^- \pi^+)/\Gamma_{\text{total}}$					$\Gamma_{13}/\Gamma$
<u>VALUE (%)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
<b>1.43±0.27 OUR FIT</b>					
<b>1.80±0.50±0.14</b>	45 ± 7	LI	19A	BELL	$e^+ e^-$ at $\Upsilon(4S)$

$\Gamma(\Xi^- \pi^+)/\Gamma(\Xi^- \pi^+ \pi^+ \pi^-)$	$\Gamma_{13}/\Gamma_{14}$			
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
<b>0.30±0.12±0.05</b>	ALBRECHT	90F ARG	e <sup>+</sup> e <sup>-</sup> at $\Upsilon(4S)$	

$\Gamma(\Omega^- K^+)/\Gamma(\Xi^- \pi^+)$	$\Gamma_{18}/\Gamma_{13}$			
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>0.294±0.018±0.016</b>	650	AUBERT,B	05M BABR	e <sup>+</sup> e <sup>-</sup> $\approx$ $\Upsilon(4S)$

$\Gamma(\Xi^0 \phi, \phi \rightarrow K^+ K^-)/\Gamma(\Xi^- \pi^+)$	$\Gamma_{16}/\Gamma_{13}$			
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>0.036±0.004±0.002</b>	311	<sup>1</sup> MCNEIL	21 BELL	e <sup>+</sup> e <sup>-</sup> at $\Upsilon(nS)$

<sup>1</sup> MCNEIL 21 assumes an azimuthally symmetric amplitude model to recover resonant and nonresonant contributions to  $\Xi_c^0 \rightarrow \Xi^0 K^+ K^-$ .

$\Gamma(\Xi^0 K^+ K^- \text{ nonresonant})/\Gamma(\Xi^- \pi^+)$	$\Gamma_{17}/\Gamma_{13}$			
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>0.039±0.004±0.002</b>	311	<sup>1</sup> MCNEIL	21 BELL	e <sup>+</sup> e <sup>-</sup> at $\Upsilon(nS)$

<sup>1</sup> MCNEIL 21 assumes an azimuthally symmetric amplitude model to recover resonant and nonresonant contributions to  $\Xi_c^0 \rightarrow \Xi^0 K^+ K^-$ .

$\Gamma(\Xi^- e^+ \nu_e)/\Gamma(\Xi^- \pi^+)$	$\Gamma_{19}/\Gamma_{13}$			
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>0.730±0.021±0.039</b>		<sup>1</sup> LI	21C BELL	e <sup>+</sup> e <sup>-</sup> at 10.52, 10.58 GeV

• • • We do not use the following data for averages, fits, limits, etc. • • •

1.38 ±0.14 ±0.22      ACHARYA      21A ALCE       $pp$  at 13 TeV

3.1 ±1.0  $\begin{smallmatrix} +0.3 \\ -0.5 \end{smallmatrix}$       54      ALEXANDER      95B CLE2      e<sup>+</sup>e<sup>-</sup>  $\approx$   $\Upsilon(4S)$

0.96 ±0.43 ±0.18      18      <sup>2</sup> ALBRECHT      93B ARG      e<sup>+</sup>e<sup>-</sup>  $\approx$  10.4 GeV

<sup>1</sup> LI 21C measures ratio  $B(\Xi_c^0 \rightarrow \Xi^- e^+ \nu_e) / B(\Xi_c^0 \rightarrow \Xi^- \mu^+ \nu_\mu) = 1.03 \pm 0.05 \pm 0.07$ .

<sup>2</sup> This ALBRECHT 93B value is the average of the  $(\Xi^- e^+ \text{ anything})/\Xi^- \pi^+$  and  $(\Xi^- \mu^+ \text{ anything})/\Xi^- \pi^+$  ratios. Here we average it with the  $\Xi^- e^+ \nu_e/\Xi^- \pi^+$  ratio.

$\Gamma(\Xi^- e^+ \nu_e)/\Gamma(\Xi^- \mu^+ \nu_\mu)$	$\Gamma_{19}/\Gamma_{20}$			
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
<b>1.03±0.05±0.07</b>	<sup>1</sup> LI	21C BELL	e <sup>+</sup> e <sup>-</sup> at 10.52, 10.58 GeV	

• • • We do not use the following data for averages, fits, limits, etc. • • •

1.03±0.05±0.07      <sup>1</sup> LI      21C BELL      e<sup>+</sup>e<sup>-</sup> at 10.52, 10.58 GeV

<sup>1</sup> LI 21C value is not independent from other quoted measurements.

$\Gamma(\Xi^- \mu^+ \nu_\mu)/\Gamma(\Xi^- \pi^+)$	$\Gamma_{20}/\Gamma_{13}$			
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
<b>0.708±0.033±0.056</b>	<sup>1</sup> LI	21C BELL	e <sup>+</sup> e <sup>-</sup> at 10.52, 10.58 GeV	

<sup>1</sup> LI 21C measures ratio  $B(\Xi_c^0 \rightarrow \Xi^- e^+ \nu_e) / B(\Xi_c^0 \rightarrow \Xi^- \mu^+ \nu_\mu) = 1.03 \pm 0.05 \pm 0.07$ .

$\Gamma(\Xi^0 \gamma)/\Gamma(\Xi^- \pi^+)$	$\Gamma_{21}/\Gamma_{13}$			
<u>VALUE</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>&lt;1.2 × 10<sup>-2</sup></b>	90	LI	23 BELL	e <sup>+</sup> e <sup>-</sup> $\rightarrow$ $\Upsilon(nS)$

———— Cabibbo-suppressed decays ————

$\Gamma(\Lambda_c^+ \pi^-)/\Gamma_{\text{total}}$   $\Gamma_{22}/\Gamma$

VALUE (units $10^{-3}$ )	EVTS	DOCUMENT ID	TECN	COMMENT
<b>5.5±1.1 OUR FIT</b>				
<b>5.5±0.2±1.8</b>	6.3k	<sup>1</sup> AAIJ	20AH	LHCB $pp$ at 13 TeV

<sup>1</sup>AAIJ 20AH extracts  $B(\Xi_c^0 \rightarrow \Lambda_c^+ \pi^-)$  using two different normalization modes:  $\Lambda_c^+ \rightarrow pK^- \pi^+$  and  $\Xi_c^+ \rightarrow pK^- \pi^+$ . The mean value of both results, taking their correlations into account, is presented as the final result. The measurement assumes production fraction ratios  $f_{\Xi_c^0}/f_{\Lambda_c^+} = (9.7 \pm 0.9 \pm 3.1) \times 10^{-2}$  (from AAIJ 19AB plus heavy quark symmetry arguments) as well as  $f_{\Xi_c^0}/f_{\Xi_c^+} = 1.00 \pm 0.01$ . It further uses the inputs  $B(\Lambda_c^+ \rightarrow pK^- \pi^+) = (6.23 \pm 0.33) \times 10^{-2}$  and  $B(\Xi_c^+ \rightarrow pK^- \pi^+) = (4.5 \pm 2.1 \pm 0.7) \times 10^{-3}$  (from LI 19C). Its correlation with  $B(\Xi_c^+ \rightarrow pK^- \pi^+)$ , as measured in AAIJ 20AH, is 0.414.

$\Gamma(\Lambda_c^+ \pi^-)/\Gamma(\Xi^- \pi^+)$   $\Gamma_{22}/\Gamma_{13}$

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
<b>0.38±0.05 OUR FIT</b>				
<b>0.38±0.04±0.04</b>	1468	<sup>1</sup> TANG	23	BELL $e^+e^- \rightarrow \Upsilon(nS)$

<sup>1</sup>TANG 23 reports fitted masses  $m_{\Lambda_c^+} = 2286.55 \pm 0.03$  MeV and  $m_{\Xi_c^0} = 2470.43 \pm 0.06$  MeV.

$\Gamma(\Xi^- K^+)/\Gamma(\Xi^- \pi^+)$   $\Gamma_{23}/\Gamma_{13}$

VALUE (units $10^{-2}$ )	EVTS	DOCUMENT ID	TECN	COMMENT
<b>2.75±0.51±0.25</b>	314 ± 58	CHISTOV	13	BELL $e^+e^- \approx \Upsilon(4S)$

$\Gamma(\Lambda K^+ K^- (\text{no } \phi))/\Gamma(\Xi^- \pi^+)$   $\Gamma_{24}/\Gamma_{13}$

VALUE (units $10^{-2}$ )	EVTS	DOCUMENT ID	TECN	COMMENT
<b>2.86±0.61±0.37</b>	510 ± 110	CHISTOV	13	BELL $e^+e^- \approx \Upsilon(4S)$

$\Gamma(\Lambda \phi)/\Gamma(\Xi^- \pi^+)$   $\Gamma_{25}/\Gamma_{13}$

VALUE (units $10^{-2}$ )	EVTS	DOCUMENT ID	TECN	COMMENT
<b>3.43±0.58±0.32</b>	316 ± 54	CHISTOV	13	BELL $e^+e^- \approx \Upsilon(4S)$

$\Xi_c^0$  DECAY PARAMETERS

See the note on “Baryon Decay Parameters” in the neutron Listings.

$\alpha$  FOR  $\Xi_c^0 \rightarrow \Xi^- \pi^+$

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
<b>−0.64±0.05±0.01</b>		LI	21C	BELL $e^+e^-$ at 10.52, 10.58 GeV
• • • We do not use the following data for averages, fits, limits, etc. • • •				
$-0.56 \pm 0.39^{+0.10}_{-0.09}$	138	CHAN	01	CLE2 $e^+e^- \approx \Upsilon(4S)$

### $\alpha$ FOR $\Xi_c^0 \rightarrow \Xi^+ \pi^-$

VALUE	DOCUMENT ID	TECN	COMMENT
<b>0.61±0.05±0.01</b>	LI	21C BELL	$e^+ e^-$ at 10.52, 10.58 GeV

### $\alpha$ FOR $\Xi_c^0 \rightarrow \Lambda \bar{K}^*(892)^0$

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
<b>0.15±0.22±0.04</b>	4k	<sup>1</sup> JIA	21 BELL	$e^+ e^-$ at $\Upsilon(nS)$

<sup>1</sup> JIA 21 measures  $\alpha(\Xi_c^0 \rightarrow \Lambda \bar{K}^*(892)^0) \alpha(\Lambda \rightarrow p \pi^-) = 0.115 \pm 0.164 \pm 0.031$ , and uses  $\alpha(\Lambda \rightarrow p \pi^-) = 0.747 \pm 0.010$ .

### $\alpha$ FOR $\Xi_c^0 \rightarrow \Sigma^+ K^*(892)^-$

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
<b>-0.52±0.30±0.02</b>	373	<sup>1</sup> JIA	21 BELL	$e^+ e^-$ at $\Upsilon(nS)$

<sup>1</sup> JIA 21 measures  $\alpha(\Xi_c^0 \rightarrow \Sigma^+ \bar{K}^*(892)^-) \alpha(\Sigma^+ \rightarrow p \pi^0) = 0.514 \pm 0.295 \pm 0.012$ , and uses  $\alpha(\Sigma^+ \rightarrow p \pi^0) = -0.980 \pm 0.017$ .

## $\Xi_c^0$ REFERENCES

LI	23	PR D107 032001	Y. Li <i>et al.</i>	(BELLE Collab.)
TANG	23	PR D107 032005	S.S. Tang <i>et al.</i>	(BELLE Collab.)
AAIJ	22Y	SCIB 67 479	R. Aaij <i>et al.</i>	(LHCb Collab.)
ACHARYA	21A	PRL 127 272001	S. Acharya <i>et al.</i>	(ALICE Collab.)
JIA	21	JHEP 2106 160	S. Jia <i>et al.</i>	(BELLE Collab.)
LI	21C	PRL 127 121803	Y.B. Li <i>et al.</i>	(BELLE Collab.)
LI	21F	PR D105 L011102	Y. Li <i>et al.</i>	(BELLE Collab.)
MCNEIL	21	PR D103 112002	J.T. McNeil <i>et al.</i>	(BELLE Collab.)
AAIJ	20AH	PR D102 071101	R. Aaij <i>et al.</i>	(LHCb Collab.)
PDG	20	PTEP 2020 083C01	P.A. Zyla <i>et al.</i>	(PDG Collab.)
AAIJ	19AB	PR D99 052006	R. Aaij <i>et al.</i>	(LHCb Collab.)
AAIJ	19AG	PR D100 032001	R. Aaij <i>et al.</i>	(LHCb Collab.)
LI	19A	PRL 122 082001	Y.B. Li <i>et al.</i>	(BELLE Collab.)
LI	19C	PR D100 031101	Y.B. Li <i>et al.</i>	(BELLE Collab.)
AALTONEN	14B	PR D89 072014	T. Aaltonen <i>et al.</i>	(CDF Collab.)
CHISTOV	13	PR D88 071103	R. Chistov <i>et al.</i>	(BELLE Collab.)
AUBERT,B	05M	PRL 95 142003	B. Aubert <i>et al.</i>	(BABAR Collab.)
LESIK	05	PL B605 237	T. Lesiak <i>et al.</i>	(BELLE Collab.)
Also		PL B617 198 (errat.)	T. Lesiak <i>et al.</i>	(BELLE Collab.)
DANKO	04	PR D69 052004	I. Danko <i>et al.</i>	(CLEO Collab.)
LINK	02H	PL B541 211	J.M. Link <i>et al.</i>	(FNAL FOCUS Collab.)
CHAN	01	PR D63 111102	S. Chan <i>et al.</i>	(CLEO Collab.)
FRABETTI	98B	PL B426 403	P.L. Frabetti <i>et al.</i>	(FNAL E687 Collab.)
ALEXANDER	95B	PRL 74 3113	J. Alexander <i>et al.</i>	(CLEO Collab.)
Also		PRL 75 4155 (errat.)	J. Alexander <i>et al.</i>	(CLEO Collab.)
ALBRECHT	93B	PL B303 368	H. Albrecht <i>et al.</i>	(ARGUS Collab.)
FRABETTI	93C	PRL 70 2058	P.L. Frabetti <i>et al.</i>	(FNAL E687 Collab.)
HENDERSON	92B	PL B283 161	S. Henderson <i>et al.</i>	(CLEO Collab.)
ALBRECHT	90F	PL B247 121	H. Albrecht <i>et al.</i>	(ARGUS Collab.)
BARLAG	90	PL B236 495	S. Barlag <i>et al.</i>	(ACCMOR Collab.)
ALAM	89	PL B226 401	M.S. Alam <i>et al.</i>	(CLEO Collab.)
AVERY	89	PRL 62 863	P. Avery <i>et al.</i>	(CLEO Collab.)