

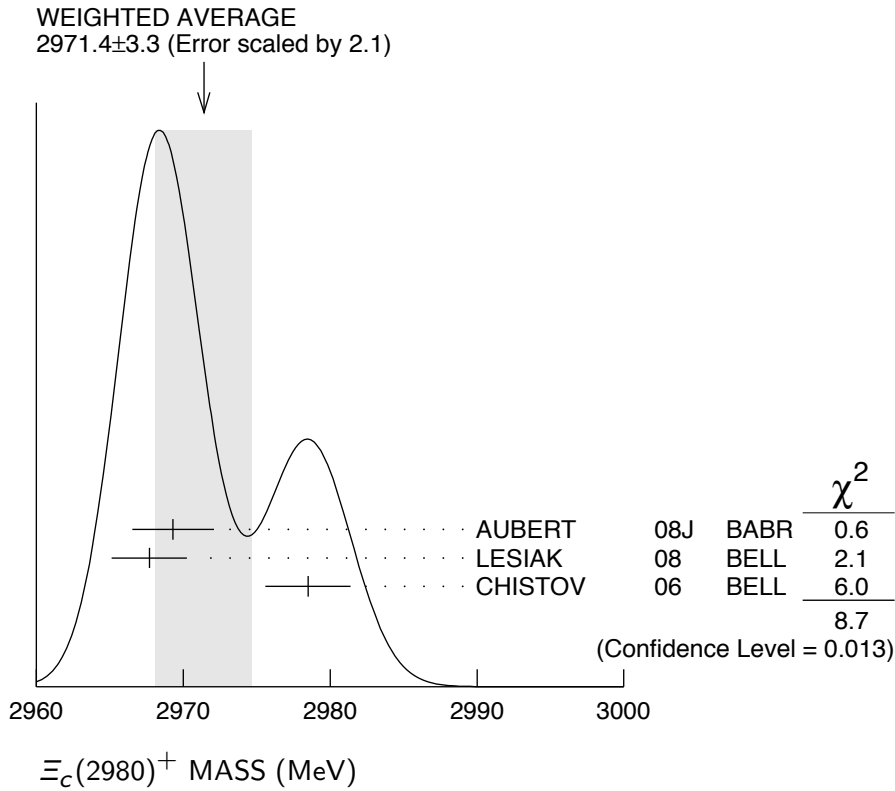
$\Xi_c(2980)$

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

$\Xi_c(2980)$ MASSES

$\Xi_c(2980)^+$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
2971.4 ± 3.3 OUR AVERAGE Error includes scale factor of 2.1. See the ideogram below.				
2969.3 ± 2.2 ± 1.7	756 ± 206	AUBERT	08J BABR	$e^+e^- \approx 10.58$ GeV
2967.7 ± 2.3 $^{+1.1}_{-1.2}$	78 ± 13	LESIAK	08 BELL	$e^+e^- \approx \gamma(4S)$
2978.5 ± 2.1 ± 2.0	405 ± 51	CHISTOV	06 BELL	$e^+e^- \approx \gamma(4S)$



$\Xi_c(2980)^0$ MASS

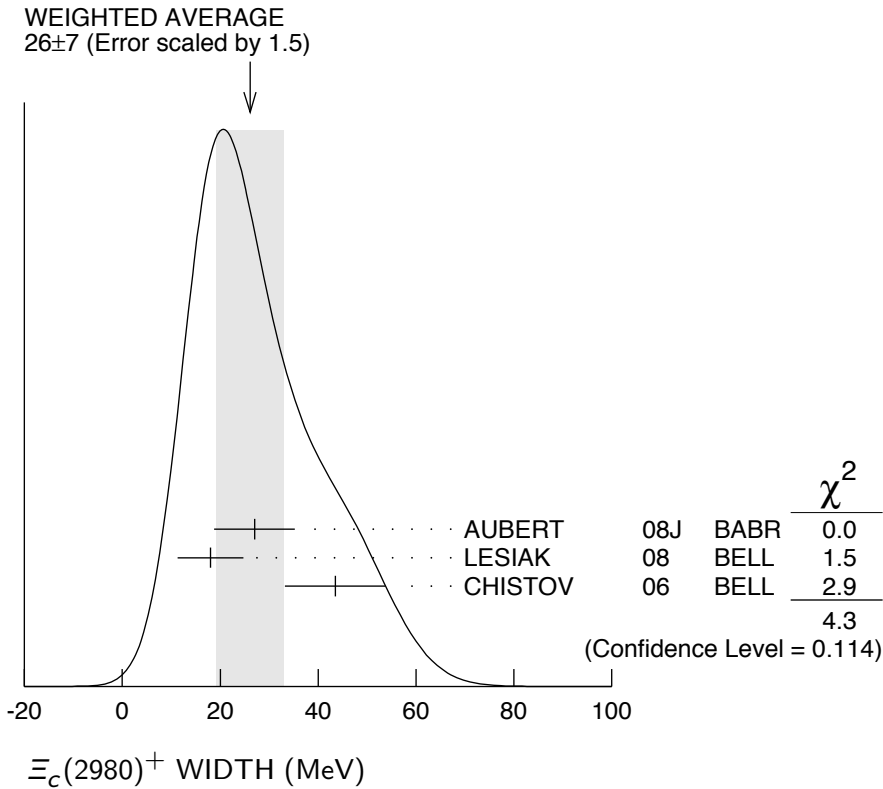
The evidence is statistically weaker for this charge state.

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
2968.0 ± 2.6 OUR AVERAGE Error includes scale factor of 1.2.				
2972.9 ± 4.4 ± 1.6	67 ± 44	AUBERT	08J BABR	$e^+e^- \approx 10.58$ GeV
2965.7 ± 2.4 $^{+1.1}_{-1.2}$	57 ± 13	LESIAK	08 BELL	$e^+e^- \approx \gamma(4S)$
2977.1 ± 8.8 ± 3.5	42 ± 24	CHISTOV	06 BELL	$e^+e^- \approx \gamma(4S)$

$\Xi_c(2980)$ WIDTHS

$\Xi_c(2980)^+$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
26 ±7 OUR AVERAGE				Error includes scale factor of 1.5. See the ideogram below.
27 ±8 ±2	756 ± 206	AUBERT	08J BABR	$e^+ e^- \approx 10.58$ GeV
18 ±6 ±3	78 ± 13	LESIK	08 BELL	$e^+ e^- \approx \Upsilon(4S)$
43.5 ±7.5 ±7.0	405 ± 51	CHISTOV	06 BELL	$e^+ e^- \approx \Upsilon(4S)$



$\Xi_c(2980)^0$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
20±7 OUR AVERAGE				Error includes scale factor of 1.3.
31±7±8	67 ± 44	AUBERT	08J BABR	$e^+ e^- \approx 10.58$ GeV
15±6±3	57 ± 13	LESIK	08 BELL	$e^+ e^- \approx \Upsilon(4S)$

$\Xi_c(2980)$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
Γ_1 $\Lambda_c^+ \bar{K} \pi$	seen
Γ_2 $\Sigma_c(2455) \bar{K}$	seen
Γ_3 $\Lambda_c^+ \bar{K}$	not seen
Γ_4 $\Xi_c 2\pi$	seen
Γ_5 $\Xi_c(2645) \pi$	seen

$\Xi_c(2980)$ BRANCHING RATIOS

$\Gamma(\Lambda_c^+ \bar{K} \pi) / \Gamma_{\text{total}}$ Γ_1 / Γ

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
seen	AUBERT	08J	BABR $e^+ e^- \approx \Upsilon(4S)$
seen	CHISTOV	06	BELLE $e^+ e^- \approx \Upsilon(4S)$

$\Gamma(\Sigma_c(2455) \bar{K}) / \Gamma(\Lambda_c^+ \bar{K} \pi)$ Γ_2 / Γ_1

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
0.55 ± 0.07 ± 0.13	AUBERT	08J	BABR $e^+ e^- \approx \Upsilon(4S)$

$\Gamma(\Xi_c(2645) \pi) / \Gamma_{\text{total}}$ Γ_5 / Γ

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
seen	LESIAK	08	BELLE $e^+ e^- \approx \Upsilon(4S)$

$\Xi_c(2980)$ REFERENCES

AUBERT	08J	PR D77 012002	B. Aubert <i>et al.</i>	(BABAR Collab.)
LESIAK	08	PL B665 9	T. Lesiak <i>et al.</i>	(BELLE Collab.)
CHISTOV	06	PRL 97 162001	R. Chistov <i>et al.</i>	(BELLE Collab.)