Ξ_{cc}^+

$I(J^P) = ?(?^?)$ Status: *

OMITTED FROM SUMMARY TABLE

Ξ_{cc}^+ MASS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
3518.9±0.9 OUR AVERAGE					
3518 ±3	6	[1] OCHERASHVI..05		SELX	Σ^- nucleus ≈ 600 GeV
3519 ±1	16	[2] MATTSON	02	SELX	Σ^- nucleus ≈ 600 GeV

[1] OCHERASHVILI 05 claims "an excess of 5.62 events over ... 1.38 ± 0.13 events" for a significance of 4.8 σ in pD^+K^- events.

[2] MATTSON 02 claims "an excess of 15.9 events over an expected background of 6.1 ± 0.5 events, a statistical significance of 6.3 σ" in the $\Lambda_c^+ K^- \pi^+$ invariant-mass spectrum. The probability that the peak is a fluctuation increases from 1.0×10^{-6} to 1.1×10^{-4} when the number of bins searched is considered.

Ξ_{cc}^+ MEAN LIFE

VALUE (10^{-15} s)	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
<33	90	MATTSON	02	SELX	Σ^- nucleus, ≈ 600 GeV

Ξ_{cc}^+ DECAY MODES

	Mode
Γ_1	$\Lambda_c^+ K^- \pi^+$
Γ_2	pD^+K^-

$\Gamma(pD^+K^-)/\Gamma(\Lambda_c^+ K^-\pi^+)$ Γ_2/Γ_1

VALUE	*EVTS*	*DOCUMENT ID*	*TECN*	*COMMENT*
0.36±0.21	6	OCHERASHVI..05	SELX	Σ^- ≈ 600 GeV

Ξ_{cc}^+ REFERENCES

OCHERASHVI...05	PL B628 18	A. Ocherashvili *et al.*	(FNAL SELEX Collab.)
MATTSON 02	PRL 89 112001	M. Mattson *et al.*	(FNAL SELEX Collab.)