



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

OMITTED FROM SUMMARY TABLE

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

See the paper for various other tests made of the significance of the signal. Confirmation is needed before the state can be considered to be established.

**$\Xi_c^+$  MASS**

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>3519 ±1</b>	16	<sup>1</sup> MATTSON 02	SELX	$\Sigma^-$ nucleus, $\approx 600$ GeV

<sup>1</sup>This error is statistical; MATTSON 02 does not give a systematic uncertainty on the mass.

**$\Xi_c^+$  MEAN LIFE**

<u>VALUE (<math>10^{-15}</math> s)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>&lt;33</b>	90	MATTSON 02	SELX	$\Sigma^-$ nucleus, $\approx 600$ GeV

**$\Xi_c^+$  REFERENCES**

MATTSON 02	PRL 89 112001	M. Mattson <i>et al.</i>	(FNAL SELEX Collab.)
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