

$\Lambda_c(2910)^+$ $I(J^P) = ?(??)$ Status: *

OMITTED FROM SUMMARY TABLE

A candidate heavy quark symmetry doublet partner to the $\Lambda_c(2940)$.
Further study is needed to confirm whether this state is an excited
 Λ_c or Σ_c .

 $\Lambda_c(2910)^+$ MASS

| VALUE (MeV) | EVTS | DOCUMENT ID | TECN | COMMENT |
|-----------------------|------|-----------------|----------|---|
| 2913.8±5.6±3.8 | 150 | ¹ LI | 23E BELL | $\bar{B}^0 \rightarrow \Sigma_c(2455)^{0,++} \pi^\pm \bar{p}$ |

¹ LI 23E observes evidence for the $\Lambda_c(2910)^+$ at 4.2σ significance.

 $\Lambda_c(2910)^+$ WIDTH

| VALUE (MeV) | EVTS | DOCUMENT ID | TECN | COMMENT |
|-----------------------|------|-----------------|----------|---|
| 51.8±20.0±18.8 | 150 | ¹ LI | 23E BELL | $\bar{B}^0 \rightarrow \Sigma_c(2455)^{0,++} \pi^\pm \bar{p}$ |

¹ LI 23E observes evidence for the $\Lambda_c(2910)^+$ at 4.2σ significance.

 $\Lambda_c(2910)^+$ DECAY MODES

| Mode | Fraction (Γ_i/Γ) |
|--|--------------------------------|
| $\Gamma_1 \quad \Sigma_c(2455)^0 \pi^+$ | seen |
| $\Gamma_2 \quad \Sigma_c(2455)^{++} \pi^-$ | seen |

 $\Lambda_c(2910)^+$ BRANCHING RATIOS

| $\Gamma(\Sigma_c(2455)^0 \pi^+)/\Gamma_{\text{total}}$ | Γ_1/Γ | | |
|--|-------------------|----------|--|
| VALUE | DOCUMENT ID | TECN | COMMENT |
| seen | LI | 23E BELL | $\bar{B}^0 \rightarrow \Sigma_c(2455)^0 \pi^+ \bar{p}$ |

| $\Gamma(\Sigma_c(2455)^{++} \pi^-)/\Gamma_{\text{total}}$ | Γ_2/Γ | | |
|---|-------------------|----------|---|
| VALUE | DOCUMENT ID | TECN | COMMENT |
| seen | LI | 23E BELL | $\bar{B}^0 \rightarrow \Sigma_c(2455)^{++} \pi^- \bar{p}$ |

 $\Lambda_c(2910)^+$ REFERENCES

| | | | | |
|----|-----|----------------|-----------------------|-----------------|
| LI | 23E | PRL 130 031901 | Y.B. Li <i>et al.</i> | (BELLE Collab.) |
|----|-----|----------------|-----------------------|-----------------|