

$P_{c\bar{c}s}(4338)^0$ $I(J^P) = 0(\frac{1}{2}^-)$ Status: *

AAIJ 23Q determines that spin-parity $J^P = 1/2^-$ is preferred, while spin-parity $J^P = 1/2^+$ is excluded at a 90% confidence level and spin $J = 3/2$ hypotheses are discarded.

 $P_{c\bar{c}s}(4338)^0$ MASS

| VALUE (MeV) | EVTS | DOCUMENT ID | TECN | COMMENT |
|-----------------------|------|-------------|------|---|
| 4338.2±0.7±0.4 | 4.4k | AAIJ | 23Q | LHCB $B^- \rightarrow J/\psi \Lambda \bar{p}$ |

 $P_{c\bar{c}s}(4338)^0$ WIDTH

| VALUE (MeV) | EVTS | DOCUMENT ID | TECN | COMMENT |
|--------------------|------|-------------|------|---|
| 7.0±1.2±1.3 | 4.4k | AAIJ | 23Q | LHCB $B^- \rightarrow J/\psi \Lambda \bar{p}$ |

 $P_{c\bar{c}s}(4338)^0$ DECAY MODES

| Mode | Fraction (Γ_i/Γ) |
|--------------------------------|--------------------------------|
| Γ_1 $J/\psi \Lambda$ | seen |
| Γ_2 $\Lambda_c^+ D_s^-$ | not seen |

 $P_{c\bar{c}s}(4338)^0$ BRANCHING RATIOS

| $\Gamma(J/\psi \Lambda)/\Gamma_{\text{total}}$ | Γ_1/Γ | | | |
|--|-------------------|-------------|------|---|
| VALUE | EVTS | DOCUMENT ID | TECN | COMMENT |
| seen | 4.4k | AAIJ | 23Q | LHCB $B^- \rightarrow J/\psi \Lambda \bar{p}$ |

| $\Gamma(\Lambda_c^+ D_s^-)/\Gamma_{\text{total}}$ | Γ_2/Γ | | |
|---|-------------------|------|---------------------|
| VALUE | DOCUMENT ID | TECN | COMMENT |
| not seen | ¹ AAIJ | 25AK | LHCB pp at 13 TeV |

¹ An analysis of $\Lambda_b^0 \rightarrow \Lambda_c^+ D_s^- K^+ K^-$ decays, AAIJ 25AK reports $B(\Lambda_b^0 \rightarrow P_{c\bar{c}s}(4338)^0 K^+ K^-, P_{c\bar{c}s} \rightarrow \Lambda_c^+ D_s^-) / B(\Lambda_b^0 \rightarrow \Lambda_c^+ D_s^- K^+ K^-) < 0.12$ at 95% CL.

 $P_{c\bar{c}s}(4338)^0$ REFERENCES

| | | | |
|------|---------------------|-----------------------|-------------------|
| AAIJ | 25AK PR D112 052013 | R. Aaij <i>et al.</i> | (LHCb Collab.) |
| AAIJ | 23Q PRL 131 031901 | R. Aaij <i>et al.</i> | (LHCb Collab.) JP |