

$\Omega_c(3065)^0$  $I(J^P) = ?(??)$  Status: \*\*\*AAIJ 21AC rejects  $J = 1/2$  hypothesis at  $3.6 \sigma$ . $\Omega_c(3065)^0$  MASS

| VALUE (MeV)  | EVTS  | DOCUMENT ID       | TECN      | COMMENT                    |
|--|-------|-------------------|-----------|----------------------------|
| <b>3065.54 ± 0.26 OUR AVERAGE</b>                    |       |                   |           |                            |
| 3065.9 ± 0.4 ± 0.4 <sup>+0.19</sup> <sub>-0.22</sub> | 51    | <sup>1</sup> AAIJ | 21AC LHCB | $pp$ at 7, 8, 13 TeV       |
| 3064.9 ± 0.6 ± 0.2                                   | 82    | YELTON            | 18B BELLE | $e^+e^-$ at $\Upsilon(4S)$ |
| 3065.6 ± 0.1 ± 0.3                                   | 1.74k | AAIJ              | 17AH LHCB | $pp$ at 7, 8, 13 TeV       |

<sup>1</sup> Measured via  $\Omega_b^- \rightarrow \Omega_c^{*0} \pi^- \rightarrow \Xi_c^+ K^- \pi^-$ . The third uncertainty is due to the uncertainty in the  $\Xi_c^+$  mass.

 $\Omega_c(3065)^0$  WIDTH

| VALUE (MeV)  | EVTS  | DOCUMENT ID | TECN      | COMMENT              |
|--|-------|-------------|-----------|----------------------|
| <b>3.3 ± 0.6 OUR AVERAGE</b> Error includes scale factor of 1.5. |       |             |           |                      |
| 1.7 ± 1.0 ± 0.5  | 51    | AAIJ        | 21AC LHCB | $pp$ at 7, 8, 13 TeV |
| 3.5 ± 0.4 ± 0.2  | 1.74k | AAIJ        | 17AH LHCB | $pp$ at 7, 8, 13 TeV |

 $\Omega_c(3065)^0$  DECAY MODES

| Mode                         | Fraction ( $\Gamma_i/\Gamma$ ) |
|------------------------------|--------------------------------|
| $\Gamma_1 \quad \Xi_c^+ K^-$ | seen                           |

 $\Omega_c(3065)^0$  BRANCHING RATIOS

| $\Gamma(\Xi_c^+ K^-)/\Gamma_{\text{total}}$ | EVTS  | DOCUMENT ID       | TECN      | COMMENT                    | $\Gamma_1/\Gamma$ |
|---|-------|-------------------|-----------|----------------------------|-------------------|
| seen  | 51    | <sup>1</sup> AAIJ | 21AC LHCB | $pp$ at 7, 8, 13 TeV       |                   |
| seen  | 82    | YELTON            | 18B BELLE | $e^+e^-$ at $\Upsilon(4S)$ |                   |
| <b>seen</b>                                 | 1.74k | <sup>2</sup> AAIJ | 17AH LHCB | $pp$ at 7, 8, 13 TeV       |                   |

<sup>1</sup> AAIJ 21AC report a significance of  $11.9 \sigma$ .<sup>2</sup> AAIJ 17AH report a significance of  $23.9 \sigma$ . $\Omega_c(3065)^0$  REFERENCES

|        |                      |                         |                 |
|--------|----------------------|-------------------------|-----------------|
| AAIJ   | 21AC PR D104 L091102 | R. Aaij <i>et al.</i>   | (LHCb Collab.)  |
| YELTON | 18B PR D97 051102    | J. Yelton <i>et al.</i> | (BELLE Collab.) |
| AAIJ   | 17AH PRL 118 182001  | R. Aaij <i>et al.</i>   | (LHCb Collab.)  |