



$$J^P = \frac{1}{2}^+$$

OMITTED FROM SUMMARY TABLE

### $\Xi_{bc}^0$ DECAY MODES

Mode	Fraction ( $\Gamma_i/\Gamma$ )	Confidence level
$\Gamma_1 \quad D^0 p K^- \times B(b \rightarrow \Xi_{bc}^0)/B(b \rightarrow \Lambda_b)$	$< 1.4 \times 10^{-5}$	95%

### $\Xi_{bc}^0$ BRANCHING RATIOS

$$\frac{\Gamma(D^0 p K^- \times B(b \rightarrow \Xi_{bc}^0)/B(b \rightarrow \Lambda_b))}{\Gamma_{\text{total}}} \quad \Gamma_1/\Gamma$$

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
$< 1.4 \times 10^{-5}$	95	1,2 AAIJ	20AMLHCB	$pp$ at 13 TeV

<sup>1</sup> AAIJ 20AM reports upper limits for  $[\Gamma(\Xi_{bc}^0 \rightarrow D^0 p K^- \times B(b \rightarrow \Xi_{bc}^0)/B(b \rightarrow \Lambda_b)) / \Gamma_{\text{total}}] / [B(\Lambda_b^0 \rightarrow p D^0 K^-)] < 3.0 \times 10^{-1} - 1.7 \times 10^{-2}$  for the considered  $\Xi_{bc}^0$  mass and lifetime hypotheses ranging from 6.7 to 7.2 GeV and from 100 to 500 fs. We use the  $3.0 \times 10^{-1}$  limit for the quoted result.

<sup>2</sup> AAIJ 20AM reports  $[\Gamma(\Xi_{bc}^0 \rightarrow D^0 p K^- \times B(b \rightarrow \Xi_{bc}^0)/B(b \rightarrow \Lambda_b)) / \Gamma_{\text{total}}] / [B(\Lambda_b^0 \rightarrow p D^0 K^-)] < 3.0 \times 10^{-1}$  which we multiply by our best value  $B(\Lambda_b^0 \rightarrow p D^0 K^-) = 4.5 \times 10^{-5}$ .

### $\Xi_{bc}^0$ REFERENCES

AAIJ	20AM JHEP 2011 095	R. Aaij <i>et al.</i>	(LHCb Collab.)
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