

$B_c(2S)^\pm$

$$I^G(J^{PC}) = ?^?(?^{??})$$

OMITTED FROM SUMMARY TABLE

Quantum numbers neither measured nor confirmed.

$B_c(2S)^\pm$ MASS

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
6842±4±5	¹ AAD	14AQ ATLS	<i>pp</i> at 7, 8 TeV

¹ Observed in the decay mode $B_c(2S)^+ \rightarrow B_c^+ \pi^+ \pi^-$ ($B_c^+ \rightarrow J/\psi \pi^+$) with 5.2 standard deviations significance.

$B_c(2S)^\pm$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \quad B_c^+ \pi^+ \pi^-$	seen

$B_c(2S)^\pm$ BRANCHING RATIOS

$\Gamma(B_c^+ \pi^+ \pi^-)/\Gamma_{\text{total}}$	Γ_1/Γ		
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
seen	² AAD	14AQ ATLS	<i>pp</i> at 7, 8 TeV

² Observed with 5.2 standard deviations significance.

$B_c(2S)^\pm$ REFERENCES

AAD 14AQ PRL 113 212004 G. Aad *et al.* (ATLAS Collab.)