

# $B_2^*(5747)^+$

$I(J^P) = \frac{1}{2}(2^+)$  Status: \*\*  
*I, J, P* need confirmation.

Quantum numbers shown are quark-model predictions.

## $B_2^*(5747)^+$ MASS

OUR FIT uses  $m_{B^0}$  and  $m_{B_2^{*+}} - m_{B^0}$  to determine  $m_{B_2^*(5747)^+}$ .

VALUE (MeV)	DOCUMENT ID
<b><math>5736.9^{+1.3}_{-1.6}</math> OUR FIT</b>	

## $m_{B_2^{*+}} - m_{B^0}$

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
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**$457.3^{+1.3}_{-1.6}$  OUR FIT**

**$457.3 \pm 1.3^{+0.3}_{-0.9}$**  <sup>1</sup>AALTONEN 14l CDF  $\rho\bar{p}$  at 1.96 TeV

<sup>1</sup>AALTONEN 14l reports  $m_{B_2^*(5747)^+} - m_{B^0} - m_{\pi^+} = 317.7 \pm 1.2^{+0.3}_{-0.9}$  MeV which we adjusted by the  $\pi^+$  mass.

## $B_2^*(5747)^+$ WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
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**$11^{+4+3}_{-3-4}$**  AALTONEN 14l CDF  $\rho\bar{p}$  at 1.96 TeV

## $B_2^*(5747)^+$ DECAY MODES

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1 \quad B^0 \pi^+$	seen

## $B_2^*(5747)^+$ BRANCHING RATIOS

$\Gamma(B^0 \pi^+)/\Gamma_{\text{total}}$	DOCUMENT ID	TECN	COMMENT	$\Gamma_1/\Gamma$
<b>seen</b>	AALTONEN	14l	CDF	$\rho\bar{p}$ at 1.96 TeV

## $B_2^*(5747)^+$ REFERENCES

AALTONEN 14l PR D90 012013 T. Aaltonen *et al.* (CDF Collab.)