

**$B_{s1}(5830)^0$**

$I(J^P) = 0(1^+)$  Status: \*\*\*  
*I, J, P* need confirmation.

Quantum numbers shown are quark-model predictions.

**$B_{s1}(5830)^0$  MASS**

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>5829.4 ± 0.7</b>	<sup>1</sup> AALTONEN 08K	CDF	$p\bar{p}$ at 1.96 TeV

<sup>1</sup> Uses two-body decays into  $K^-$  and  $B^+$  mesons reconstructed as  $B^+ \rightarrow J/\psi K^+$ ,  $J/\psi \rightarrow \mu^+ \mu^-$  or  $B^+ \rightarrow \bar{D}^0 \pi^+$ ,  $\bar{D}^0 \rightarrow K^+ \pi^-$ .

**$m_{B_{s1}^0} - m_{B^{*+}}$**

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>504.41 ± 0.21 ± 0.14</b>	<sup>2</sup> AALTONEN 08K	CDF	$p\bar{p}$ at 1.96 TeV

<sup>2</sup> Uses two-body decays into  $K^-$  and  $B^+$  mesons reconstructed as  $B^+ \rightarrow J/\psi K^+$ ,  $J/\psi \rightarrow \mu^+ \mu^-$  or  $B^+ \rightarrow \bar{D}^0 \pi^+$ ,  $\bar{D}^0 \rightarrow K^+ \pi^-$ .

**$B_{s1}(5830)^0$  DECAY MODES**

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1 \quad B^{*+} K^-$	dominant

**$B_{s1}(5830)^0$  BRANCHING RATIOS**

$\Gamma(B^{*+} K^-)/\Gamma_{\text{total}}$	$\Gamma_1/\Gamma$
<b>dominant</b>	

VALUE	DOCUMENT ID	TECN	COMMENT
<b>dominant</b>	AALTONEN 08K	CDF	$p\bar{p}$ at 1.96 TeV

**$B_{s1}(5830)^0$  REFERENCES**

AALTONEN 08K PRL 100 082001 T. Aaltonen *et al.* (CDF Collab.)