

$B_{s1}(5830)^0$ $I(J^P) = 0(1^+)$ Status: ***
 I, J, P need confirmation.

Quantum numbers shown are quark-model predictions.

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

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
5828.7 ± 0.4 OUR AVERAGE	Error includes scale factor of 1.2.		
$5828.40 \pm 0.04 \pm 0.41$	¹ AAIJ	130	LHCB pp at 7 TeV
5829.4 ± 0.7	² AALTONEN	08K	CDF $p\bar{p}$ at 1.96 TeV
¹ Uses $B_{s1}(5830)^0 \rightarrow B^{*+} K^-$ decay.			
² 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
$504.41 \pm 0.21 \pm 0.14$	³ AALTONEN	08K	CDF $p\bar{p}$ at 1.96 TeV
³ 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 (Γ_i/Γ)
$\Gamma_1 \quad B^{*+} K^-$	dominant

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

$\Gamma(B^{*+} K^-)/\Gamma_{\text{total}}$	Γ_1/Γ		
dominant			
VALUE	DOCUMENT ID	TECN	COMMENT
	AALTONEN	08K	CDF $p\bar{p}$ at 1.96 TeV

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

AAIJ	130	PRL 110 151803	R. Aaij <i>et al.</i>	(LHCb Collab.)
AALTONEN	08K	PRL 100 082001	T. Aaltonen <i>et al.</i>	(CDF Collab.)