$B_{s1}(5830)^0$ 

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

Quantum numbers shown are quark-model predictions.

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

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
5828.63±0.27 OUR FIT			
$5828.40 \pm 0.04 \pm 0.41$	<sup>1</sup> AAIJ 130	LHCB	pp at 7 TeV
ullet $ullet$ We do not use the following	owing data for averages	s, fits, lin	nits, etc. • • •
5829.4 ±0.7	<sup>2</sup> AALTONEN 08	< CDF	Repl. by AALTONEN 141
<sup>1</sup> Uses $B_{s1}(5830)^0 \to B^{*-}$	$+K^-$ decay.		
_		ns recon	structed as $B^+  o J/\psi K^+$
$J/\psi \rightarrow \mu^+\mu^- \text{ or } B^+ -$			, ,
	$m_{B_{s1}^0} - m_{B^*}$	+	
VALUE (MeV)	DOCUMENT ID	TEC	NCOMMENT
503.98±0.18 OUR FIT			
$504.03\pm0.12\pm0.15$			$p\overline{p}$ at 1.96 TeV
• • • We do not use the following	owing data for averages	s, fits, lin	nits, etc. • • •
$504.41 \pm 0.21 \pm 0.14$	<sup>4</sup> AALTONEN 0	8k CDF	Repl. by AALTONEN 141
<sup>3</sup> AALTONEN 141 reports <i>r</i>	$m_{B_1(5830)0} - m_{B^{*+}}$	- m <sub>K</sub> -	$_{-}=10.35\pm0.12\pm0.15$ MeV
		/\	
which we adjusted by the	$K^-$ mass. to $K^-$ and $B^+$ meso	ns recon	structed as $B^+  ightarrow J/\psi  {\it K}^+$
which we adjusted by the <sup>4</sup> Uses two-body decays in	$K^-$ mass. to $K^-$ and $B^+$ meso	ns recon $\pi^-$ .	
which we adjusted by the $^4$ Uses two-body decays int $J/\psi \to ~\mu^+\mu^-$ or $B^+-$	$K^-$ mass. to $K^-$ and $B^+$ meso: $\rightarrow \overline{D}{}^0\pi^+$ , $\overline{D}{}^0\rightarrow K^+$ $B_{s1}(5830)^0$ WII	ns recon $\pi^-$ .	structed as $B^+ o J/\psiK^+$
which we adjusted by the <sup>4</sup> Uses two-body decays in	$K^-$ mass. to $K^-$ and $B^+$ meso: $\rightarrow \overline{D}{}^0\pi^+$ , $\overline{D}{}^0\rightarrow K^+$ $B_{s1}(5830)^0$ WII	ns recon $\pi^-$ .	
which we adjusted by the $^4$ Uses two-body decays int $J/\psi\to \mu^+\mu^-$ or $B^+ VALUE~({\rm MeV})$	$K^-$ mass. to $K^-$ and $B^+$ meson $\overline{D}{}^0\pi^+$ , $\overline{D}{}^0\to K^+$ $B_{s1}$ (5830) $^0$ WII	ns recon $\pi^-$ . <b>DTH</b> 141 C	structed as $B^+  o J/\psi K^+$ $ECN  o COMMENT$ DF $p\overline{p}$ at 1.96 TeV
which we adjusted by the $^4$ Uses two-body decays int $J/\psi\to \mu^+\mu^-$ or $B^+ VALUE~({\rm MeV})$	$K^-$ mass. to $K^-$ and $B^+$ meson $\to \overline{D}{}^0\pi^+$ , $\overline{D}{}^0 \to K^+$ $B_{s1}(5830)^0$ WIII $= \frac{DOCUMENT\ ID}{AALTONEN}$ $B_{s1}(5830)^0$ DECAY	ns recon $\pi^-$ . <b>DTH</b> 141 C	structed as $B^+  o J/\psi K^+$ $ECN  o COMMENT$ DF $p\overline{p}$ at 1.96 TeV
which we adjusted by the $^4$ Uses two-body decays int $J/\psi \to \mu^+\mu^-$ or $B^+-$ $\underline{VALUE  (\text{MeV})}$ $\textbf{0.5\pm0.3\pm0.3}$	$K^-$ mass. to $K^-$ and $B^+$ meson $ ightarrow \overline{D}{}^0\pi^+$ , $\overline{D}{}^0  ightarrow K^+$ $B_{s1}(5830)^0$ WIII $rac{DOCUMENT\ ID}{AALTONEN}$ $B_{s1}(5830)^0$ DECAY	ns recon $\pi^-$ .  DTH  141 C	structed as $B^+  o J/\psi K^+$ $ECN  o COMMENT$ $DF  o p \overline{p}$ at 1.96 TeV $ES$ $(\Gamma_i/\Gamma)$
which we adjusted by the $^4$ Uses two-body decays in $J/\psi \to \mu^+\mu^-$ or $B^+-\psi^-$ where $B^+$ is $B^+$ in $B^+$ is $B^+$ in $B^+$	$K^-$ mass. to $K^-$ and $B^+$ meson $\to \overline{D}{}^0\pi^+$ , $\overline{D}{}^0 \to K^+$ $B_{s1}(5830)^0$ WIII DOCUMENT ID AALTONEN $B_{s1}(5830)^0$ DECAY	ns recon $\pi^-$ .  TH  141 C  MODE  Fraction  dominan	structed as $B^+  o J/\psi K^+$ $ECN  o COMMENT$ $DF  o p\overline{p}$ at 1.96 TeV $ES$ $(\Gamma_i/\Gamma)$
which we adjusted by the $^4$ Uses two-body decays in $J/\psi \to \mu^+\mu^-$ or $B^+-$ $\frac{VALUE(\text{MeV})}{\textbf{0.5\pm0.3\pm0.3}}$ Mode $\Gamma_1 \qquad B^{*+}K^-$	$K^-$ mass. to $K^-$ and $B^+$ meson $ ightarrow \overline{D}{}^0\pi^+$ , $\overline{D}{}^0  ightarrow K^+$ $B_{s1}(5830)^0$ WIII $rac{DOCUMENT\ ID}{AALTONEN}$ $B_{s1}(5830)^0$ DECAY	ns recon $\pi^-$ .  TH  141 C  MODE  Fraction  dominan	structed as $B^+  o J/\psi K^+$ $ECN  o COMMENT$ $DF  o p \overline{p}$ at 1.96 TeV $ES$ $(\Gamma_i/\Gamma)$ $E$
which we adjusted by the $^4$ Uses two-body decays into $J/\psi \to \mu^+\mu^-$ or $B^+-\Phi^+$ $WALUE~(MeV)$ 0.5 $\pm$ 0.3 $\pm$ 0.3	to $K^-$ mass. to $K^-$ and $B^+$ meson $ \frac{1}{D} = 1$	ns recon $\pi^-$ .  DTH  141 C  MODE  Fraction  dominan	structed as $B^+  o J/\psi K^+$ $ECN  o COMMENT$ $DF  o p\overline{p}$ at 1.96 TeV $ES$ $(\Gamma_i/\Gamma)$ $E$ $F$ $F$ $F$ $F$ $F$ $F$ $F$
which we adjusted by the $^4$ Uses two-body decays in $J/\psi \to \mu^+\mu^-$ or $B^+-$ $\frac{VALUE(\text{MeV})}{\textbf{0.5\pm0.3\pm0.3}}$ Mode $\Gamma_1 \qquad B^{*+}K^-$	to $K^-$ mass. to $K^-$ and $B^+$ meson $ \frac{1}{D} 1$	ns recon  Toth  Total  Total	structed as $B^+  o J/\psi K^+$ $ECN  o COMMENT$ $DF  o p\overline{p}$ at 1.96 TeV $ES$ $(\Gamma_i/\Gamma)$

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