NODE=M187

$B_{s1}(5830)^0$

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

Quantum numbers shown are quark-model predictions. NODE=M187

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

NODE=M187M

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
5828.7 ±0.4 OUR AVERAGE Error includes scale factor of 1.2. [5829.4 ± 0.7 MeV OUR 2012 AVERAGE]				
5828.40±0.04±0.41	[1] AAIJ	13O	LHCB	pp at 7 TeV
5829.4 ±0.7	[2] AALTONEN	08K	CDF	$p\overline{p}$ at 1.96 TeV

NODE=M187M
NEW

[1] Uses $B_{s1}(5830)^0 \rightarrow B^{*+}K^-$ decay. NODE=M187M;LINKAGE=AI

[2] Uses two-body decays into K^- and B^+ mesons reconstructed as $B^+ \rightarrow J/\psi K^+$, $J/\psi \rightarrow \mu^+\mu^-$ or $B^+ \rightarrow \overline{D}^0\pi^+$, $\overline{D}^0 \rightarrow K^+\pi^-$. NODE=M187M;LINKAGE=AA

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

NODE=M187DM

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
504.41±0.21±0.14	[3] AALTONEN	08K	CDF	$p\overline{p}$ at 1.96 TeV

NODE=M187DM

[3] Uses two-body decays into K^- and B^+ mesons reconstructed as $B^+ \rightarrow J/\psi K^+$, $J/\psi \rightarrow \mu^+\mu^-$ or $B^+ \rightarrow \overline{D}^0\pi^+$, $\overline{D}^0 \rightarrow K^+\pi^-$. NODE=M187DM;LINKAGE=AA

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

NODE=M187215;NODE=M187

	Mode	Fraction (Γ_i/Γ)
Γ_1	$B^{*+}K^-$	dominant

DESIG=1

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

NODE=M187220

$\Gamma(B^{*+}K^-)/\Gamma_{total}$ — Γ_1/Γ

NODE=M187R01

VALUE	DOCUMENT ID		TECN	COMMENT
dominant	AALTONEN	08K	CDF	$p\overline{p}$ at 1.96 TeV

NODE=M187R01

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

NODE=M187

AAIJ	13O	PRL 110 151803	R. Aaij *et al.*	(LHCb Collab.)
AALTONEN	08K	PRL 100 082001	T. Aaltonen *et al.*	(CDF Collab.)

REFID=54968
REFID=52235