NODE=M219

$B_2^*(5747)^+$

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

Quantum numbers shown are quark-model predictions. NODE=M219

$B_2^*(5747)^+$ MASS

NODE=M219M

OUR FIT uses m_{B^0} and $m_{B_2^{*+}} - m_{B^0}$ to determine $m_{B_2^*(5747)^+}$. NODE=M219M

VALUE (MeV)	DOCUMENT ID	NODE=M219M
5737.2±0.7 OUR FIT		

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

NODE=M219DM

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT	NODE=M219DM
457.5 ±0.7 OUR FIT						
457.5 ±0.7 OUR AVERAGE						
457.62±0.72±0.40	4K	[1] AAIJ	15AB	LHCB	pp at 7, 8 TeV	
457.3 ±1.3 $^{+0.3}_{-0.9}$		[2] AALTONEN	14I	CDF	$p\overline{p}$ at 1.96 TeV	

[1] AAIJ 15AB reports $[m_{B_2^{*+}} - m_{B^0}] - m_{\pi^+} = 318.1 \pm 0.7 \pm 0.4$ MeV which we adjust by the π^+ mass. The masses inside the square brackets were measured for each candidate event. NODE=M219DM;LINKAGE=B

[2] AALTONEN 14I 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 π^+ mass. NODE=M219DM;LINKAGE=A

$B_2^*(5747)^+$ WIDTH

NODE=M219W

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT	NODE=M219W
20 ±5 OUR AVERAGE Error includes scale factor of 2.2.						
23.6±2.0±2.1	4K	AAIJ	15AB	LHCB	pp at 7, 8 TeV	
11 $^{+4}_{-3}$ $^{+3}_{-4}$		AALTONEN	14I	CDF	$p\overline{p}$ at 1.96 TeV	

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

NODE=M219215;NODE=M219

	Mode	Fraction (Γ_i/Γ)	
Γ_1	$B^0\pi^+$	seen	DESIG=1
Γ_2	$B^{*0}\pi^+$	seen	DESIG=2

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

NODE=M219220

$\Gamma(B^0\pi^+)/\Gamma_{total}$ Γ_1/Γ

NODE=M219R01

VALUE	EVTS	DOCUMENT ID		TECN	COMMENT	NODE=M219R01
seen	4K	AAIJ	15AB	LHCB	pp at 7, 8 TeV	
seen		AALTONEN	14I	CDF	$p\overline{p}$ at 1.96 TeV	

$\Gamma(B^{*0}\pi^+)/\Gamma_{total}$ Γ_2/Γ

NODE=M219R02

VALUE	EVTS	DOCUMENT ID		TECN	COMMENT	NODE=M219R02
seen	4k	AAIJ	15AB	LHCB	pp at 7, 8 TeV	

$\Gamma(B^{*0}\pi^+)/\Gamma(B^0\pi^+)$ Γ_2/Γ_1

NODE=M219R03

VALUE	EVTS	DOCUMENT ID		TECN	COMMENT	NODE=M219R03
1.0±0.5±0.8	4k	AAIJ	15AB	LHCB	pp at 7, 8 TeV	

$B_2^*(5747)^+$ REFERENCES

NODE=M219

AAIJ	15AB	JHEP 1504 024	R. Aaij *et al.*	(LHCb Collab.)
AALTONEN	14I	PR D90 012013	T. Aaltonen *et al.*	(CDF Collab.)

REFID=56628
REFID=56029