$D_{sJ}(2460)^{\pm}$

$I(J^P) = 0(1^+)$

Zero spin excluded by the observation of the decay to $D_s^+\gamma$, the decay angular distribution consistent with spin 1.

$D_{sJ}(2460)^{\pm}$ MASS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
2459.3±1.3 OUR FIT	Error includes scale factor of 1.3.				
• • • We do not use the following data for averages, fits, limits, etc. • • •					
2456.5±1.3±1.3	126	[1,2] MIKAMI	04	BELL	10.6 e^+e^-
2459.5±1.3±2.0	152	[3,4] MIKAMI	04	BELL	10.6 e^+e^-
2459.9±0.9±1.6	60	[3,4] MIKAMI	04	BELL	10.6 e^+e^-
2459.2±1.6±2.0	57	KROKOVNY	03B	BELL	10.6 e^+e^-

[1] Not independent of the corresponding $m_{D_{sJ}(2460)^{\pm}} - m_{D_s^{*\pm}}$.

[2] Using $m_{D_s^{*+}}$ = 2112.4 ± 0.7 MeV.

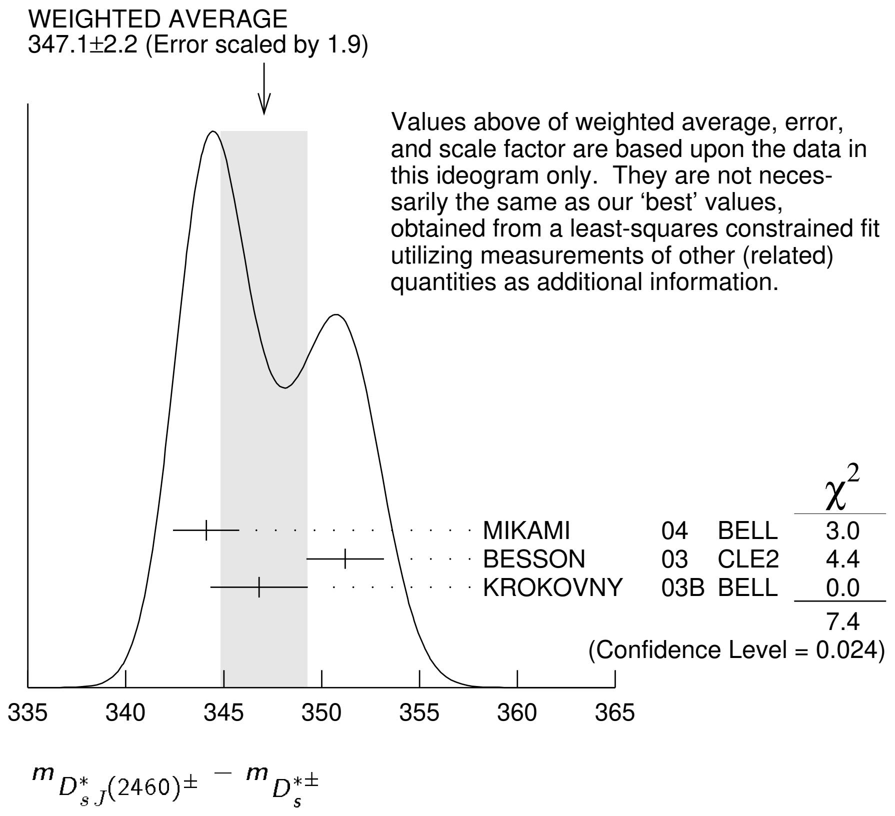
[3] Not independent of the corresponding $m_{D_{sJ}(2460)^{\pm}} - m_{D_s^{\pm}}$.

[4] Using $m_{D_s^+}$ = 1968.5 ± 0.6 MeV.

$m_{D_{sJ}(2460)^{\pm}} - m_{D_s^{*\pm}}$

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
347.2±1.2 OUR FIT	Error includes scale factor of 1.3.				
347.1±2.2 OUR AVERAGE	Error includes scale factor of 1.9. See the ideogram below.				
344.1±1.3±1.1	126	MIKAMI	04	BELL	10.6 e^+e^-
351.2±1.7±1.0	41	BESSON	03	CLE2	10.6 e^+e^-
346.8±1.6±1.9	57	[5] KROKOVNY	03B	BELL	10.6 e^+e^-

[5] Recalculated by us using $m_{D_s^{*+}}$ = 2112.4 ± 0.7 MeV.



$m_{D_{sJ}(2460)^\pm} - m_{D^\pm_s}$

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
491.0±1.2 OUR FIT Error includes scale factor of 1.3.					
491.3±1.4 OUR AVERAGE					
491.0±1.3±1.9	152	[6] MIKAMI	04	BELL	10.6 e^+e^-
491.4±0.9±1.5	60	[7] MIKAMI	04	BELL	10.6 e^+e^-

[6] From the decay to $D^\pm_s \gamma$.

[7] From the decay to $D^\pm_s \pi^+ \pi^-$.

$D_{sJ}(2460)^\pm$ WIDTH

VALUE (MeV)	*CL%*	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
<5.5	90	126	MIKAMI	04	BELL	10.6 e^+e^-
• • • We do not use the following data for averages, fits, limits, etc. • • •						
<7	90	41	BESSON	03	CLE2	10.6 e^+e^-

$D_{sJ}(2460)^+$ DECAY MODES

$D_{sJ}(2460)^-$ modes are charge conjugates of the modes below.

	Mode
Γ_1	$D_s^{*+}\pi^0$
Γ_2	$D_s^+\gamma$
Γ_3	$D_s^+\pi^+\pi^-$
Γ_4	$D_s^{*+}\gamma$
Γ_5	$D_{sJ}^*(2317)^+\gamma$

$D_{sJ}(2460)^{\pm}$ BRANCHING RATIOS

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

VALUE	EVTS	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •					
seen	41	BESSON	03	CLE2	10.6 e^+e^-

$\Gamma(D_s^+\gamma)/\Gamma(D_s^{*+}\pi^0)$ — Γ_2/Γ_1

VALUE	CL%	EVTS	DOCUMENT ID		TECN	COMMENT
0.44±0.09 OUR AVERAGE						
0.55±0.13±0.08		152	MIKAMI	04	BELL	10.6 e^+e^-
0.38±0.11±0.04		38	KROKOVNY	03B	BELL	10.6 e^+e^-
• • • We do not use the following data for averages, fits, limits, etc. • • •						
<0.49	90		BESSON	03	CLE2	10.6 e^+e^-

$\Gamma(D_s^+\pi^+\pi^-)/\Gamma(D_s^{*+}\pi^0)$ — Γ_3/Γ_1

VALUE	CL%	EVTS	DOCUMENT ID		TECN	COMMENT
0.14±0.04±0.02		60	MIKAMI	04	BELL	10.6 e^+e^-
• • • We do not use the following data for averages, fits, limits, etc. • • •						
<0.08	90		BESSON	03	CLE2	10.6 e^+e^-

$\Gamma(D_s^{*+}\gamma)/\Gamma(D_s^{*+}\pi^0)$ — Γ_4/Γ_1

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
<0.16	90	BESSON	03	CLE2	10.6 e^+e^-
• • • We do not use the following data for averages, fits, limits, etc. • • •					
<0.31	90	MIKAMI	04	BELL	10.6 e^+e^-

$\Gamma(D_{sJ}^*(2317)^+\gamma)/\Gamma(D_s^{*+}\pi^0)$ — Γ_5/Γ_1

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •					
<0.58	90	BESSON	03	CLE2	10.6 e^+e^-

$D_s(2460)^{\pm}$ REFERENCES

MIKAMI	04	PRL 92 012002	Y. Mikami *et al.*	(BELLE Collab.)
BESSON	03	PR D68 032002	D. Besson *et al.*	(CLEO Collab.)
KROKOVNY	03B	PRL 91 262002	P. Krokovny *et al.*	(BELLE Collab.)

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