$X(1835)$

$I^G(J^{PC}) = ?^?(?^{-+})$

OMITTED FROM SUMMARY TABLE

Needs confirmation. Seen by BAI 03F and ABLIKIM 05R in radiative decays of the J/ψ. Evidence for a threshold enhancement in the $p\overline{p}$ mass spectrum was also reported by ABE 02K and WANG 05A in $B^+ \to p\overline{p}K^+$, WANG 05A in $B^0 \to p\overline{p}K^0_S$, and ABE 02W in $\overline{B}^0 \to D^0 p\overline{p}$ decays.

$X(1835)$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
1833.7±6.1±2.7	264	ABLIKIM	05R	BES2	$J/\psi \to \gamma\pi^+\pi^-\eta'$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
1831 ±7		[1] ABLIKIM	05R	BES2	$J/\psi \to \gamma p\overline{p}$

[1] From the fit including final state interaction effects in isospin 0 S-wave according to SIBIRTSEV 05A. Systematic errors not estimated.

$X(1835)$ WIDTH

VALUE (MeV)	CL%	EVTS	DOCUMENT ID		TECN	COMMENT
67.7±20.3±7.7		264	ABLIKIM	05R	BES2	$J/\psi \to \gamma\pi^+\pi^-\eta'$
• • • We do not use the following data for averages, fits, limits, etc. • • •						
<153	90		[2] ABLIKIM	05R	BES2	$J/\psi \to \gamma p\overline{p}$

[2] From the fit including final state interaction effects in isospin 0 S-wave according to SIBIRTSEV 05A. Systematic errors not estimated.

$\phi_3(1850)$ $X(1835)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$p\overline{p}$	seen
Γ_2	$\pi^+\pi^-\eta'$	seen

$X(1835)$ BRANCHING RATIOS

$\Gamma(p\overline{p})/\Gamma(\pi^+\pi^-\eta')$ — Γ_1/Γ_2

VALUE	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
0.333	ABLIKIM	05R	BES2	$J/\psi \to \gamma\pi^+\pi^-\eta'$

X(1835) REFERENCES

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