$\Omega(2012)^-$

$I(J^P) = 0(?^-)$ Status: ***

Seen in $\Xi^0 K^-$ and $\Xi^- K^0_S$ decays with a combined significance of 8.3 standard deviations.

$\Omega(2012)^-$ MASS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
2012.4±0.7±0.6	520	YELTON	18A	BELL	In $\Upsilon(1S)$, $\Upsilon(2S)$, $\Upsilon(3S)$

$\Omega(2012)^-$ WIDTH

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
$\mathbf{6.4^{+2.5}_{-2.0}\pm1.6}$	520	YELTON	18A	BELL	In $\Upsilon(1S)$, $\Upsilon(2S)$, $\Upsilon(3S)$

$\Omega(2012)^-$ DECAY MODES

Branching fractions are given relative to the one **DEFINED AS 1**.

	Mode	Fraction (Γ_i/Γ)	Confidence level
Γ_1	ΞK		
Γ_2	$(\Xi\pi)K$		
Γ_3	$\Xi^0 K^-$	**DEFINED AS 1**	
Γ_4	$\Xi^- \overline{K}^0$	0.83±0.21	
Γ_5	$\Xi^0 \pi^0 K^-$	<0.30	90%
Γ_6	$\Xi^0 \pi^- \overline{K}^0$	<0.21	90%
Γ_7	$\Xi^- \pi^0 \overline{K}^0$	<0.7	90%
Γ_8	$\Xi^- \pi^+ K^-$	<0.08	90%

$\Omega(2012)^-$ BRANCHING RATIOS

$\Gamma((\Xi\pi)K)/\Gamma(\Xi K)$ Γ_2/Γ_1

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
<0.119	90	JIA	19	BELL	In $\Upsilon(1S, 2S, 3S)$

$\Gamma(\Xi^0 K^-)/\Gamma(\Xi^- \overline{K}^0)$ Γ_3/Γ_4

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
1.2±0.3	YELTON	18A	BELL	In $\Upsilon(1S, 2S, 3S)$

$\Gamma(\Xi^0 \pi^0 K^-)/\Gamma(\Xi^0 K^-)$ Γ_5/Γ_3

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
<0.304	90	JIA	19	BELL	In $\Upsilon(1S, 2S, 3S)$

$\Gamma(\Xi^0 \pi^- \overline{K}^0)/\Gamma(\Xi^0 K^-)$ Γ_6/Γ_3

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
<0.213	90	JIA	19	BELL	In $\Upsilon(1S, 2S, 3S)$

$\Gamma(\Xi^0\pi^-\overline{K}^0)/\Gamma(\Xi^-\overline{K}^0)$ Γ_6/Γ_4

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
<0.256	90	JIA	19	BELL	In $\Upsilon(1S,2S,3S)$

$\Gamma(\Xi^-\pi^0\overline{K}^0)/\Gamma(\Xi^-\overline{K}^0)$ Γ_7/Γ_4

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
<0.811	90	JIA	19	BELL	In $\Upsilon(1S,2S,3S)$

$\Gamma(\Xi^-\pi^+K^-)/\Gamma(\Xi^0K^-)$ Γ_8/Γ_3

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
<0.078	90	JIA	19	BELL	In $\Upsilon(1S,2S,3S)$

$\Gamma(\Xi^-\pi^+K^-)/\Gamma(\Xi^-\overline{K}^0)$ Γ_8/Γ_4

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
<0.093	90	JIA	19	BELL	In $\Upsilon(1S,2S,3S)$

$\Omega(2012)^-$ REFERENCES

JIA	19	PR D100 032006	S. Jia *et al.*	(BELLE Collab.)
YELTON	18A	PRL 121 052003	J. Yelton *et al.*	(BELLE Collab.)