Ω BARYONS
($S = -3$, $I = 0$)

$\Omega^- = sss$

$\Omega(2250)^-$

$I(J^P) = 0(?^?)$ Status: ∗∗∗

$\Omega(2250)^-$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
2252± 9 OUR AVERAGE					
2253±13	44	ASTON	87B	LASS	$K^- p$ 11 GeV/c
2251± 9±8	78	BIAGI	86B	SPEC	SPS Ξ^- beam

$\Omega(2250)^-$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
55±18 OUR AVERAGE					
81±38	44	ASTON	87B	LASS	$K^- p$ 11 GeV/c
48±20	78	BIAGI	86B	SPEC	SPS Ξ^- beam

$\Omega(2250)^-$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$\Xi^- \pi^+ K^-$	seen
Γ_2	$\Xi(1530)^0 K^-$	seen

$\Omega(2250)^-$ BRANCHING RATIOS

$\Gamma(\Xi(1530)^0 K^-)/\Gamma(\Xi^- \pi^+ K^-)$ **Γ_2/Γ_1**

VALUE	EVTS	DOCUMENT ID		TECN	COMMENT
∼ 1.0	44	ASTON	87B	LASS	$K^- p$ 11 GeV/c
0.70±0.20	49	BIAGI	86B	SPEC	Ξ^- Be 116 GeV/c

$\Omega(2250)^-$ REFERENCES

ASTON	87B	PL B194 579	+Awaji, Bienz, Bird+	(SLAC, NAGO, CINC, INUS)
BIAGI	86B	ZPHY C31 33	+	(LOQM, GEVA, RAL, HEIDP, LAUS, BRIS, CERN)

*CITATION: L. Montanet et al., Physical Review D50, 1173 (1994) and 1995 off-year partial update for the 1996 edition (URL: http://pdg.lbl.gov/)

$\Omega(2380)^-$

Status: ∗∗

OMITTED FROM SUMMARY TABLE

$\Omega(2380)^-$ MASS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
≈ 2380 OUR ESTIMATE					
$2384\pm9\pm8$	45	BIAGI	86B	SPEC	SPS Ξ^- beam

$\Omega(2380)^-$ WIDTH

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
26 ± 23	45	BIAGI	86B	SPEC	SPS Ξ^- beam

$\Omega(2380)^-$ DECAY MODES

	Mode
Γ_1	$\Xi^- \pi^+ K^-$
Γ_2	$\Xi(1530)^0 K^-$
Γ_3	$\Xi^- \overline{K}{}^*(892)^0$

$\Omega(2380)^-$ BRANCHING RATIOS

$\Gamma(\Xi(1530)^0 K^-)/\Gamma(\Xi^- \pi^+ K^-)$ — Γ_2/Γ_1

VALUE	*CL%*	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
<0.44	90	9	BIAGI	86B	SPEC	Ξ^- Be 116 GeV/c

$\Gamma(\Xi^- \overline{K}{}^*(892)^0)/\Gamma(\Xi^- \pi^+ K^-)$ — Γ_3/Γ_1

VALUE	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
0.5 ± 0.3	21	BIAGI	86B	SPEC	Ξ^- Be 116 GeV/c

$\Omega(2380)^-$ REFERENCES

BIAGI 86B ZPHY C31 33 + (LOQM, GEVA, RAL, HEIDP, LAUS, BRIS, CERN)

$\Omega(2470)^-$

Status: ∗∗

OMITTED FROM SUMMARY TABLE

A peak in the $\Omega^- \pi^+ \pi^-$ mass spectrum with a signal significance claimed to be at least 5.5 standard deviations. There is no reason to seriously doubt the existence of this state, but unless the evidence is overwhelming we usually wait for confirmation from a second experiment before elevating peaks to the Summary Table.

$\Omega(2470)^-$ MASS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
$\mathbf{2474\pm12}$	59	ASTON	88G	LASS	$K^- p$ 11 GeV/c

$\Omega(2470)^-$ WIDTH

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
$\mathbf{72\pm33}$	59	ASTON	88G	LASS	$K^- p$ 11 GeV/c

$\Omega(2470)^-$ DECAY MODES

	Mode
Γ_1	$\Omega^- \pi^+ \pi^-$

*CITATION: L. Montanet et al., Physical Review D50, 1173 (1994) and 1995 off-year partial update for the 1996 edition (URL: http://pdg.lbl.gov/)

$\Omega(2470)^-$ REFERENCES

ASTON	88G PL B215 799	+Awaji, Bienz, Bird+	(SLAC, NAGO, CINC, INUS)