$\Sigma(2100)\ 7/2^-$

$I(J^P) = 1(\frac{7}{2}^-)$ Status: $*$

OMITTED FROM SUMMARY TABLE

$\Sigma(2100)$ MASS

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
$\approx$ **2100 OUR ESTIMATE**				
2060 ± 20	BARBARO-...	70	DPWA	$K^- p \to \Lambda \pi^0$
2120 ± 30	BARBARO-...	70	DPWA	$K^- p \to \Sigma \pi$

$\Sigma(2100)$ WIDTH

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
70 ± 30	BARBARO-...	70	DPWA	$K^- p \to \Lambda \pi^0$
135 ± 30	BARBARO-...	70	DPWA	$K^- p \to \Sigma \pi$

$\Sigma(2100)$ DECAY MODES

	Mode
Γ_1	$N \overline{K}$
Γ_2	$\Lambda \pi$
Γ_3	$\Sigma \pi$

$\Sigma(2100)$ BRANCHING RATIOS

See "Sign conventions for resonance couplings" in the Note on Λ and Σ Resonances.

$(\Gamma_i \Gamma_f)^{1/2}/\Gamma_{total}$ in $N\overline{K} \to \Sigma(2100) \to \Lambda \pi$ $(\Gamma_1 \Gamma_2)^{1/2}/\Gamma$

VALUE	DOCUMENT ID		TECN	COMMENT
-0.07 ± 0.02	BARBARO-...	70	DPWA	$K^- p \to \Lambda \pi^0$

$(\Gamma_i \Gamma_f)^{1/2}/\Gamma_{total}$ in $N\overline{K} \to \Sigma(2100) \to \Sigma \pi$ $(\Gamma_1 \Gamma_3)^{1/2}/\Gamma$

VALUE	DOCUMENT ID		TECN	COMMENT
$+0.13 \pm 0.02$	BARBARO-...	70	DPWA	$K^- p \to \Sigma \pi$

$\Sigma(2100)$ REFERENCES

BARBARO-... 70 Duke Conf. 173 A. Barbaro-Galtieri (LRL) IJP
Hyperon Resonances, 1970