$\Sigma(2100)$ G_{17}

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

OMITTED FROM SUMMARY TABLE

$\Sigma(2100)$ MASS

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

$\Sigma(2100)$ WIDTH

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

$\Sigma(2100)$ 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 $N\overline{K} \rightarrow \Sigma(2100) \rightarrow \Lambda\pi$ $(\Gamma_1\Gamma_2)^{1/2}/\Gamma$

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

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

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

$\Sigma(2100)$ REFERENCES

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