$N(\sim 3000$ Region) Partial-Wave Analyses

OMITTED FROM SUMMARY TABLE

We list here miscellaneous high-mass candidates for isospin-1/2 resonances found in partial-wave analyses.

Our 1982 edition had an $N(3245)$, an $N(3690)$, and an $N(3755)$, each a narrow peak seen in a production experiment. Since nothing has been heard from them since the 1960's, we declare them to be dead. There was also an $N(3030)$, deduced from total cross-section and 180° elastic cross-section measurements; it is the KOCH 80 $L_{1,15}$ state below.

$N(\sim 3000)$ BREIT-WIGNER MASS

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
≈ 3000 OUR ESTIMATE				
2600	KOCH	80	IPWA	$\pi N \rightarrow \pi N$ D_{13}
3100	KOCH	80	IPWA	$\pi N \rightarrow \pi N$ $L_{1,15}$ wave
3500	KOCH	80	IPWA	$\pi N \rightarrow \pi N$ $M_{1,17}$ wave
3500 to 4000	KOCH	80	IPWA	$\pi N \rightarrow \pi N$ $N_{1,19}$ wave
3500±200	HENDRY	78	MPWA	$\pi N \rightarrow \pi N$ $L_{1,15}$ wave
3800±200	HENDRY	78	MPWA	$\pi N \rightarrow \pi N$ $M_{1,17}$ wave
4100±200	HENDRY	78	MPWA	$\pi N \rightarrow \pi N$ $N_{1,19}$ wave

$N(\sim 3000)$ BREIT-WIGNER WIDTH

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
1300±200	HENDRY	78	MPWA	$\pi N \rightarrow \pi N$ $L_{1,15}$ wave
1600±200	HENDRY	78	MPWA	$\pi N \rightarrow \pi N$ $M_{1,17}$ wave
1900±300	HENDRY	78	MPWA	$\pi N \rightarrow \pi N$ $N_{1,19}$ wave

$N(\sim 3000)$ DECAY MODES

	Mode
Γ_1	$N\pi$

$N(\sim 3000)$ BRANCHING RATIOS

$\Gamma(N\pi)/\Gamma_{total}$ **Γ_1/Γ**

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
0.055±0.02	HENDRY	78	MPWA	$\pi N \rightarrow \pi N$ $L_{1,15}$ wave
0.040±0.015	HENDRY	78	MPWA	$\pi N \rightarrow \pi N$ $M_{1,17}$ wave
0.030±0.015	HENDRY	78	MPWA	$\pi N \rightarrow \pi N$ $N_{1,19}$ wave

$N(\sim 3000)$ REFERENCES

KOCH	80	Toronto Conf. 3	R. Koch	(KARLT) IJP
HENDRY	78	PRL 41 222	A.W. Hendry	(IND, LBL) IJP
Also	81	ANP 136 1	A.W. Hendry	(IND) IJP