

Table 10.13 from (1984AJ01): Resonances in ${}^9\text{Be}(p, p){}^9\text{Be}$ ^a

E_{res} (keV)	E_x (MeV)	$\Gamma_{\text{c.m.}}$ (keV)	J^π	Γ_p/Γ
330	6.88	145	1^-	0.30
980 ± 10	7.468	65 ± 10	1^+	1.0
980 ± 10	7.468	80 ± 8	2^- ^d	0.90 ± 0.05
1084 ± 2	7.561	2.7	0^+	1.0
(1200 ± 30)	(7.66)	250 ± 20	(1^+)	0.30 ± 0.10
1370 ± 20	7.819	265 ± 30	1^-	0.90 ± 0.05
(2070 ± 10)	(8.4)	70 ± 10	$(1^-, 2^-)$	0.43
(2300)	(8.65)	≈ 300	$(1^+, 2^+)$	
(2480)	(8.82)		$(3^-; 1)$	
2560	8.89		$\geq 2; (1)$ ^c	large
(4600)	(10.7)			
(5100)	(11.2)			
6700 ^b	12.6	broad		

^a For references and for a listing of other reported resonances see [Table 10.13 in \(1979AJ01\)](#).

^b Weak resonance near $E_p = 6.5$ MeV in p_0 .

^c Resonance shape shows $l_p = 2$ formation with a large Γ_p/Γ : the contribution from the 2^+ state appears small ([1977KI04](#)).

^d See, however, [Table 10.16](#) and footnote ^a in [Table 10.13 of \(1979AJ01\)](#).