

Table 14.15 from (1986AJ01): Resonances in $^{10}\text{B} + \alpha$ ^a

E_α (MeV \pm keV)	$\Gamma_{\text{c.m.}}$ (keV)	Outgoing particle (x) ^b	$^{14}\text{N}^*$ (MeV)	J^π
0.95		p_0	12.29	
1.13 ± 5	30 ± 5	$p_0 \rightarrow p_3, d$	12.42	4^-
1.20 ± 5	≈ 20	$p_0, (p_2), p_3$	12.47	
1.23 ± 5	35 ± 5	p_0, p_3	12.49	
1.40 ± 5	46 ± 4	$p_1, p_2, (p_3)$	12.61	3^+
1.507 ± 5	18 ± 5	$n_0, p_0, p_1, p_2, p_3, d, \alpha$ ^c	12.690	3^-
1.645 ± 5	16 ± 3	$n_0, p_0, p_1, p_2, p_3, d, \alpha$ ^d	12.789	4^+
1.68 ± 5	5 ± 2	p_1, p_2, p_3, d	12.814	4^-
1.83 ± 5	22 ± 4	$p_0 \rightarrow p_3, d$	12.921	4^+
2.174 ± 5	15 ± 5	$n_0, p_0 \rightarrow p_3, d, \alpha_1$	13.166	1^+
2.21 ± 10	65 ± 10	α_0	13.192	3^+
2.281 ± 10	92 ± 5	$n_0, p_0 \rightarrow p_3$	13.243	2^-
2.86 ± 5	$\simeq 90$	n_0, p_1, p_2, α_1	13.656	
2.94 ± 5 ^e	105 ± 25	$n_0, p_0 \rightarrow p_3, d$	13.714	$2^-, 3^+$
2.98 ± 10 ^e	180 ± 20	$n_0, p_0, p_1, (p_2), \alpha_0$	13.74	$3^+, 1^{(+)}$
3.02 ± 10 ^e	120	p_1, p_3	13.77	(1^+)
3.40 ± 30	100	n_0, p_1	14.04	
3.56 ± 30	230	$n_0, (p_0), p_3$	14.16	
3.69 ± 50	420 ± 100	p, α_0	14.25	3^+
3.76 ± 20	150	p_1	14.30	
3.98 ± 20	100	n_0, p_0, p_2	14.56	
4.16 ± 30	50	n_0, p_0, p_3	14.59	
4.26 ± 10	100 ± 20	α_0	14.66	2^-
4.36 ± 30	125	$n_0, p_0, p_1, (p_2)$	14.73	
4.54 ± 30	140	n_0, p_2, p_3	14.86	
4.633 ± 30	43 ± 8	n_0, n_{2+3}, p_0	14.92	
4.77 ± 20	≈ 60	n_0, n_1	15.02	
5.08 ± 20	100	p_3	15.24	
5.35 ± 20	100	n_1, p_2, p_3	15.43	
6.44 ± 20	125	n_0, p_0, p_2	16.21	

Table 14.15 from (1986AJ01): Resonances in $^{10}\text{B} + \alpha$ ^a (continued)

E_α (MeV \pm keV)	$\Gamma_{\text{c.m.}}$ (keV)	Outgoing particle (x) ^b	$^{14}\text{N}^*$ (MeV)	J^π
6.70 ± 20	150	p ₂	16.40	
7.42 ± 20		p ₀	16.91	
7.78 ± 20	50	p ₃	17.17	

^a See references in [Table 14.13 in \(1981AJ01\)](#) as well as in [\(1970AJ04, 1976AJ04\)](#). See also [Table 1 in \(1975WI04\)](#).

^b n₀, n₁, n₂₊₃ correspond to $^{13}\text{N}^*(0, 2.37, 3.51 + 3.55)$; p₀, p₁, p₂, p₃ correspond to $^{13}\text{C}^*(0, 3.09, 3.68, 3.85)$ and the corresponding γ -rays; α_1 corresponds to the transition to $^{10}\text{B}^*(0.7)$. For θ_x^2 see [Table 14.8 in \(1970AJ04\)](#).

^c $\Gamma_x = 4.3, 0.62, 0.17, 0.70, 5.6, 0.93, 1.7$ keV for n₀, p₀, p₁, p₂, p₃, d, α .

^d $\Gamma_x = \leq 0.6, 0.18, 0.085, 0.44, 9.6, 2.0, 1.0$ keV for n₀, p₀, p₁, p₂, p₃, d, α .

^e See [\(1983CS03\)](#).