

Table 12.13 from (1980AJ01): Anomalies and maxima in yields of $^{11}\text{B}(p, n)^{11}\text{C}$ and $^{11}\text{B}(p, p)^{11}\text{B}$

Peak number	A		(1965OV01) ^{a,b}		(1955BA22) ^c		(1965SE06) ^e		B			J^π	E_x (MeV)
	E_p (MeV)	Γ_{lab} (keV)	E_p (MeV)	Res. in group(s)	E_p (MeV)	Γ_{lab} (keV)	E_p (MeV)	Γ_{lab} (keV)	E_p (MeV)	Γ_{lab} (keV)	Res. in group(s)		
1									0.67	330	p ₀	2 ⁻	16.57
2									1.4		p ₀	1 ⁻	17.23
3								1.98 ^d	2.08 ± 0.02 ^g	86 ± 20	p ₀	0 ⁺	17.77
4					2.664	48	2.66 ^{c,d}	46	2.6 ^h		p ₀	^h	18.40
5	3.16	100	3.16 ^f		3.15	100	3.15 ^{c,d}	100	3.12 ^k	110 ± 10	p ₀		18.84
6	3.66	500	3.58 ^f		3.4	500	3.5 ^c	broad	^j		p ₀	2 ⁻	19.3
7					3.78	50			3.85	400 ± 55	p ₀	2 ⁻	19.48
8	4.05	200	4.10	n ₀					4.10 ^k	250 ± 35	p ₀	1 ⁺	19.71
9					4.28	100			4.35	400	p ₁		19.91
10	4.70	150	4.68 ^f	n ₀	4.68	200			4.7 ^l	(350)	p ₀ , p ₁		20.24
11	5.065	180	5.07	n ₀	5.13	200			5.08	365	p ₀ , p ₁		20.60
12	5.48	300	5.50	n ₀									20.98
13	6.04	560	6.01	n ₀ , n ₁					6.05	600	p ₀ , p ₁	≥ 4	21.48
14			6.4	n ₀									21.8
15	7.29	360	7.3	n ₀ , n ₁					7.5	200	p ₀ , p ₃		22.63
16	7.74	65	7.73	n ₀ , n ₁					7.8 ^m	650	p ₀ → p ₃		23.05
17	8.25	380	8.25	n ₀ , n ₁									(23.51)
18	(8.30)	(≤ 50)											(23.56)
19	8.65	180	8.6	n ₀ , n ₂									23.88
20	9.0 ⁱ												24.2
21	9.25	110	9.25	n ₀ , n ₂					^m		p ₀ , p ₁		24.43
22	9.79	1000	9.79	n ₀ , n ₁									24.92

Table 12.13 from (1980AJ01): Anomalies and maxima in yields of $^{11}\text{B}(p, n)^{11}\text{C}$ and $^{11}\text{B}(p, p)^{11}\text{B}$ (continued)

Peak number	A		(1965OV01) ^{a,b}		(1955BA22) ^c		(1965SE06) ^e		B			J^π	E_x (MeV)
	E_p (MeV)	Γ_{lab} (keV)	E_p (MeV)	Res. in group(s)	E_p (MeV)	Γ_{lab} (keV)	E_p (MeV)	Γ_{lab} (keV)	E_p (MeV)	Γ_{lab} (keV)	Res. in group(s)		
23	10.14	180	10.1	n_0, n_2									25.24
24	10.91	440	10.9	n_0									25.95
25	11.88	300											26.84

A: See (1968AJ02).

B: (1957DE11, 1975BO1H [prelim.], 1977MA37, 1977RI01).

^a Widths ≈ 200 keV, except $E_p = 6.4$ and ≥ 9.25 MeV which are wider.

^b (p, n).

^c (p, p').

^d (p, p).

^e See also Table 12.11.

^f (p, n) (1978VA12).

^g (1977MA37) [polarized protons]: a broad 0^+ resonance at $E_p = 2.39$ MeV is also suggested.

^h (1977MA37) suggest two resonances at $E_p = 2.620$ and 2.660 MeV (± 10 keV) [$J^\pi = 3^-$ ($T = 1$) and 0^-], $\Gamma = 290 \pm 20$ and 30 ± 5 keV, respectively. In addition, a resonance at $E_p = 2.80 \pm 0.01$ MeV [$J^\pi = 3^+$], $\Gamma = 300 \pm 50$ keV, is also reported.

ⁱ Also resonance in $K_y^y(0^\circ)$ (1976LI08).

^j (1977RI01) suggest two resonances at $E_p = 3.30$ and 3.50 MeV with $\Gamma_{\text{c.m.}} = 700 \pm 200$ and 750 ± 200 keV and $J^\pi = 4^-$ and 1^- respectively. See also (1975BO1H).

^k See also (1975BO1H).

^l (1975BO1H; prelim.) also report structures in p_0 at $E_p = 4.95$ and 5.85 MeV, both $\Gamma = 0.3$ MeV, in p_0, p_2 and p_3 at $E_p = 6.7$ MeV, $\Gamma = 0.5$ MeV and in p_2 and p_3 at 7.0 MeV.

^m See (1975VA04).