

Table 11.11 from (1990AJ01):  
*R*-matrix analysis of resonant state in  $^{10}\text{B} + \text{n}$  <sup>a</sup>

$E_n$ (MeV)	$E_x$ (MeV)	$J^\pi$	$l_n$	$\Gamma_n$	$\Gamma_{\alpha_0}$	$\Gamma_{\alpha_1}$	$\Gamma_{\text{c.m.}}$ (keV)
				(c.m., MeV)			
	10.60	$\frac{7}{2}^+$	0	0.120	0.030	0.070	220
0.17	11.61	$\frac{5}{2}^+$	0	0.004	0.296	0.0	300
0.37	11.79	$\frac{7}{2}^+$	0	0.770	0.001	0.113	884
0.53 <sup>b</sup>	11.94	$\frac{5}{2}^-$	1	0.031	0.080	0.090	201
1.83	13.12	$\frac{9}{2}^-$	1	0.100	0.275	0.050	425
1.88	13.16	$\frac{5}{2}^+, \frac{7}{2}^+$	2	0.080	0.200	0.150	430
2.82	14.02	$\frac{11}{2}^+$	2	0.800	0.045	0.010	855
4.2	15.3	$(\frac{3}{2}, \frac{5}{2}, \frac{7}{2})^+$	2	0.500	0.100	0.100	700

<sup>a</sup> Analysis based on polarization and differential cross-section measurements of the elastic scattering, and on results from  $^{10}\text{B}(\text{n}, \alpha_0)$  and  $(\text{n}, \alpha_1)$ . The analysis used a two-level, four-channel *R*-matrix formalism with a non-diagonal background *R*-matrix: see (1973HA64). This analysis does not include  $^{11}\text{B}^*(14.53)$  because the resonance is weak, narrow and almost entirely in the  $\alpha$ -channel (1973CO05). See also Table 11.10.

<sup>b</sup> (1978SC31) report  $E_{\text{res}} = 495 \pm 5$  keV,  $\Gamma = 140 \pm 15$  keV,  $\sigma_{\text{max}}[\text{in } (\text{n}, \alpha_1\gamma)] = 94 \pm 6$  mb.