

Table 8.8 from (1988AJ01):  
 $^8\text{Be}$  levels from  $^7\text{Li}(p, p_0)^7\text{Li}$  and  $^7\text{Li}(p, p_1)^7\text{Li}^*$  <sup>a</sup>

$E_p$ (MeV)	$\Gamma_{\text{lab}}$ (keV)	$^8\text{Be}^*$ (MeV)	$J^\pi$	$\Gamma_{p'}$ (keV)
0.441	12.2 <sup>c</sup>	17.640 <sup>h</sup>	1 <sup>+</sup>	
1.030 ± 0.005	168	18.155	1 <sup>+</sup>	≈ 6
1.88 <sup>b</sup>	55 ± 20	18.90	2 <sup>-</sup>	
2.05	≈ 400	19.05	3 <sup>+</sup>	small
2.25		19.22	3 <sup>+</sup>	small
2.5 <sup>d</sup>	≈ 750	19.4	1 <sup>-</sup>	res
<sup>e</sup>				
4.2 ± 0.2 <sup>f</sup>	1800 ± 200	20.9	4 <sup>-</sup>	(res)
5.6	broad	22.2	<sup>g</sup>	res

<sup>a</sup> See references in [Table 8.9 \(1979AJ01\)](#).

<sup>b</sup> (p, n) threshold: see [reaction 15](#).

<sup>c</sup>  $\theta_p^2 = 0.064$ .

<sup>d</sup> See also [Table 8.7](#),  $\gamma_{n1}^2$  and  $\gamma_{p1}^2 \approx 1\%$  of Wigner limit.

<sup>e</sup> A 2<sup>+</sup> state at  $E_x \approx 20$  MeV appears to be necessary to account for the cross sections: see [Table 8.3](#) and [reaction 4](#).

<sup>f</sup> Reduced width is 70% of the Wigner limit.

<sup>g</sup> May be due to two 2<sup>+</sup> states. See also [reaction 15](#).

<sup>h</sup> See also ([1981BA36](#); theor.).