

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

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

^a See references in [Table 8.9 \(1979AJ01\)](#).

^b (p, n) threshold: see [reaction 15](#).

^c $\theta_p^2 = 0.064$.

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

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

^f Reduced width is 70% of the Wigner limit.

^g May be due to two 2⁺ states. See also [reaction 15](#).

^h See also ([1981BA36](#); theor.).