

**Fig. 8.6.** Level structure in the two isobars  ${}^7\text{Li}$  and  ${}^7\text{Be}$ . These two nuclides contain the same number of nucleons; apart from electromagnetic effect, their level schemes should be identical.  $J^\pi$  denotes spin and parity of a level,  $I$  its isospin. Parity will be discussed in Chapter 9. [For reference see F. Ajzenberg-Selove, *Nucl. Phys.* **A490**, 1 (1988).]

$$E_{IA}(Z+1) = E_{IA}(Z) + \Delta E_c - (m_n - m_H)c^2, \quad (10-8)$$

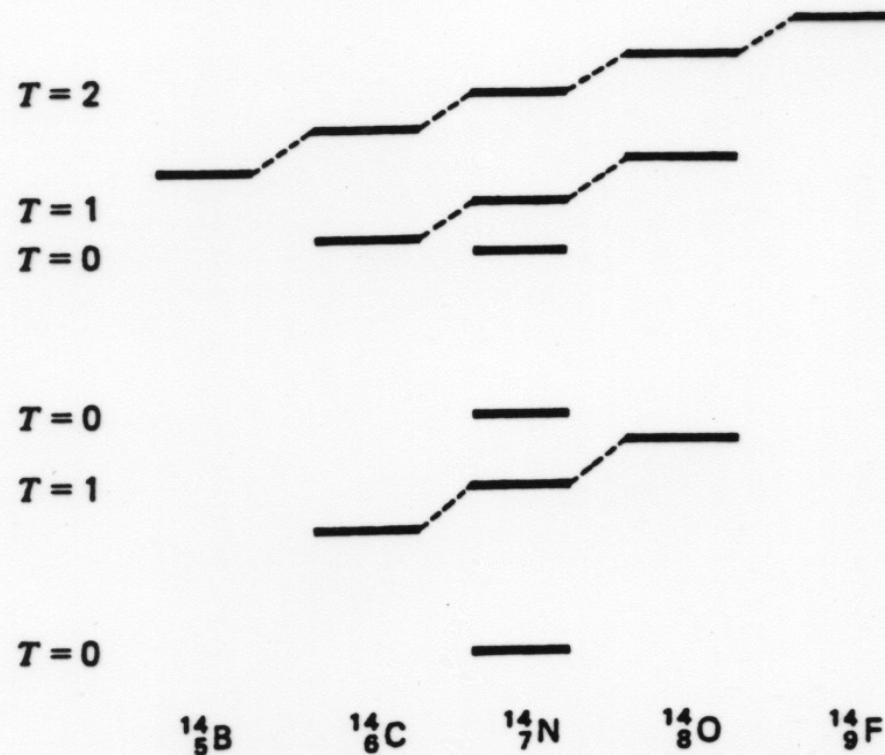


Fig. 10-2 Isobaric analog states in  $A = 14$  nuclei. States are classified according to the  $T$  quantum numbers. [Adapted from *Concepts of Nuclear Physics* by B. L. Cohen. Copyright © 1971 by McGraw Hill, Inc. Used with the permission of McGraw Hill Book Company.]

$$T_{\min} = T_2 =$$

2	1	0	1	2
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$$T_{\max} =$$

7	7	7	7	7
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