Adopted Levels

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 106, 601 (2005)	31-Oct-2005

For scattering reactions: (γ,γ'); (e,e'); (p,p'); (n,n'), see separate datasets.
^{1}H(ν,ν'): 2002Ze02: measured ratio of neutral to charged current cross sections.
Mesic atom: 2003Ma73, 2003Go12, 2003An33, 2001Sc40, 2000Po33.
The x-ray spectra from Kaonic atom: 2005Il01, 2005Be40, 2000Iw01, 1999Na46.
Hyperfine structure for muonic atom: 2005Ba69.
Anti-protonic x rays: 2000Bo58, 1999Au08.

^{1}H Levels

Cross Reference (XREF) Flags

A ^{1}n β^{-} decay (613.9 s)

E(level)	J$^{\pi}$	T$_{1/2}$	XREF	Comments
0.0	1/2^{+}	stable	A	μ=+2.792847351 *28* (2004Ei01) Electric dipole moment<0.54×10^{-23} ecm *6* (2004Ei01,2003Dm02). Other: 1989Ch51. Charge radius=0.870 fm *8* (2004Ei01). Measurements: 2001Es10, 2000Me30, 2000Ro08. J$^{\pi}$: measurements: 1930He02, 1929Mu01, 1927De01. T$_{1/2}$: >2.1×10^{29} y (independent of decay mode) (2004Ei01,2004Ah03). T>10^{31} to 10^{33} y for mode-dependent decays (2004Ei01) Measurements: 2004Ah03, 2003Ba42, 2003Zd01, 2001Tr12, 2000Be56, 1999Mc01, 1998Sh31, 1998Al14, 1991Be53, 1989Ph02. Possible decay modes are listed in detail by 2004Ei01. μ: 2004Ei01 adopt value from 2005Mo16 (2002 CODATA (http://physics.nist.gov/constants)) recommended value. μ: NMR method. Measurements: 1981Gr24, 1975Ph03, 1974Pe07, 1974Gu06, 1972Wi02, 1972Ma81 (reevaluation by 1983Ma84), 1972Lu05, 1970Fy01, 1968Kl02, 1967Pe09, 1967Ma17, 1966My01, 1966Be50, 1965Ma25, 1963Sa04, 1963Sa05, 1963Vi04, 1962Ya08, 1962Ya07, 1962Pi04, 1961Ca20, 1961Bo11, 1959Li54, 1958Dr05, 1956Wi46, 1956Wi41, 1956Tr19, 1955Co36, 1951Ga31, 1951Je10, 1951So34, 1950Th07, 1950Bl73, 1950St88 (also 1949Ro15), 1949Ta01, 1939Ke12. See also reviews by 2005St24, 1976Fu06 and 1969Fu11. Other related measurements: 2005Ka25, 2001Ge11, 2000La08, 1999Sc21, 1998Hu02, 1998Ad21, 1997Ka77, 1997Se18, 1997Wa28.