Table 5.1 from (1988AJ01): Energy levels of ^{5}He [a]

E_x (MeV)	$J^\pi; T$	$\Gamma_{c.m.}$ (MeV)	Decay	Reactions
g.s.	$\frac{3}{2}^-; \frac{1}{2}$	0.60 ± 0.02 [a]	n, α	1, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29
4 ± 1	$\frac{1}{2}^-; \frac{1}{2}$	4 ± 1	n, α	4, 6, 9, 10, 16, 20, 21, 29
16.75 ± 0.05	$\frac{3}{2}^+; \frac{1}{2}$	0.076 ± 0.012	γ, n, d, t, α	1, 2, 5, 6, 8, 10, 11, 12, 20, 21, 22
19.8 ± 0.4 [c]	$(\frac{3}{2}, \frac{5}{2})^+; \frac{1}{2}$	2.5 ± 0.5	n, d, t, α	2, 3, 5, 8, 10, 12, 14, 18, 20, 21, 22
$24 - 25$ [c]		broad		20, 21
(35.7 ± 0.4)		≈ 2		18, 22

[a] See Table 5.2 in (1966LA04) and Table 5.2 here. A study by G.M. Hale, D. Dodder and K. Witte on the S-matrix pole parameters for ^{5}He is underway. I thank Dr. Hale for his comments concerning questions regarding R- and S-matrix calculations.

[b] Positive-parity states are predicted to lie at $E_x \approx 5$ MeV ($\frac{1}{2}^+$) and 12 MeV ($\frac{3}{2}^+$, $\frac{5}{2}^+$): see (1988WO10).

[c] See the "States of ^{5}He" section in ^{5}He in (1974AJ01).