

Table 16.13 from (1977AJ02): Resonances in  $^{13}\text{C} + ^3\text{He}$ 

$E(^3\text{He})$ (MeV $\pm$ keV)	$\Gamma_{\text{c.m.}}$ (keV)	Outgoing particles	$^{16}\text{O}^*$ (MeV)	$J^\pi; T$	Refs. <sup>a</sup>
1.55	$\approx 80$	$n_0, n_3$	24.05		
$1.55 \pm 100$	450	$\gamma_0$	24.1		
2.0	$\approx 250$	$n_0$	24.4		
$2.6 \pm 100$		$\alpha\gamma_{15.1}$	24.9	$(T = 1)$	
$2.87 \pm 50$	600	$\gamma_0$	25.12	$(1^-)$	(1972VE1A)
$\approx 3.1$		$\alpha_0, \alpha_2$	$\approx 25.3$		(1971BO26)
$\approx 3.5$	$\approx 300$	$\alpha_0$	$\approx 25.6$	$(3^-)$	(1971BO26)
$\approx 4$	$\approx 300$	$\alpha_0, \alpha_1, \alpha_2$	$\approx 26$	$(3^-)$	(1971BO26)
$4.1 \pm 100$	<sup>b</sup>	$\gamma_0, \alpha\gamma_{15.1}$	26.1	$(T = 1)$	(1972VE1A, 1974SH01)
4.5		$\gamma_1 + \gamma_2$	26.4		(1974CH37) <sup>c</sup>
$5.2 \pm 100$	<sup>b</sup>	$\alpha\gamma_{15.1}$	27.0	$(T = 1)$	
$5.6 \pm 100$	$\approx 600$	$\alpha\gamma_{15.1}, ^8\text{Be}$	27.3	$(2^+; T = 1)$	
$6.0 \pm 100$	$\approx 500$	$p_0, p_{1+2}, ^3\text{He}, \alpha_0, \alpha_1, \alpha_2$	27.7	$(3^-; T = 0)$	
$\approx 6$		$\gamma_0$	28		(1972VE1A, 1974SH01)
$6.5 \pm 100$	<sup>b</sup>	$\alpha\gamma_{15.1}$	28.1	$(T = 1)$	
$6.8 \pm 100$		$\alpha_0, \alpha_1, \alpha_2$	28.3	$(T = 0)$	
$7.5 \pm 100$	<sup>b</sup>	$\alpha\gamma_{15.1}$	28.9	$(T = 1)$	
$8.6 \pm 100$	<sup>b</sup>	$\alpha\gamma_{15.1}$	29.8	$(T = 1)$	
$9.4 \pm 100$	<sup>b</sup>	$\alpha\gamma_{15.1}$	30.4	$(T = 1)$	
$10.1 \pm 100$	<sup>b</sup>	$\alpha\gamma_{15.1}$	31.0	$(T = 1)$	

<sup>a</sup> For a listing of the earlier references see Table 16.15 in (1971AJ02).

<sup>b</sup> Lab widths 0.5 – 1 MeV (1969TA09).

<sup>c</sup> And J. Lowe, private communication.