

Table 20.5 from (1959AJ76): Proton groups from $^{19}\text{F}(\text{d}, \text{p})^{20}\text{F}$

| E_x (MeV \pm keV) | E_x (MeV) | E_x (MeV) | $(2J + 1)\theta^2$ (%) | l_n | J^π |
|--------------------------|-------------------------|-------------------------|---------------------------|----------------|--|
| (1952WA1A) | (1957KH16) ^a | (1956EL1A) ^b | (1956EL1A) | (1956EL1A) | |
| 0 | | | | | |
| 0.652 \pm 8 | 0.66 | | 8.0 | 2 ^c | 1 ⁺ , 2 ⁺ , 3 ⁺ |
| 0.828 \pm 8 | 0.81 | | 0.5 | 2 | 1 ⁺ , 2 ⁺ , 3 ⁺ |
| 0.988 \pm 8 | | | 0.5 | 2 | 1 ⁺ , 2 ⁺ , 3 ⁺ |
| 1.059 \pm 8 | 1.08 | | 0.1 | 0 | 0 ⁺ , 1 ⁺ |
| 1.309 \pm 8 | 1.34 | | | iso. | |
| 1.970 \pm 8 | | | | | |
| 2.048 \pm 8 | | | 8.1 | 2 | 1 ⁺ , 2 ⁺ , 3 ⁺ |
| 2.195 \pm 8 | 2.15 | | 2.8 | 2 | 1 ⁺ , 2 ⁺ , 3 ⁺ |
| 2.870 \pm 8 | | | 5.7 | 3 | 2 ⁻ , 3 ⁻ , 4 ⁻ |
| 2.966 \pm 8 | | | 0.6 | 1 | 0 ⁻ , 1 ⁻ , 2 ⁻ |
| | 3.11 | | | | |
| 3.491 \pm 8 | | | 7.1 | 0 | 0 ⁺ , 1 ⁺ |
| 3.528 \pm 8 | | | 7.1 | 0 | 0 ⁺ , 1 ⁺ |
| 3.586 \pm 8 | 3.58 | | | | |
| 3.681 \pm 8 | 3.77 | | | | |
| 3.961 \pm 9 | | | | | |
| 4.079 \pm 9 | 4.09 | | 2.1 | 0 | 0 ⁺ , 1 ⁺ |
| 4.275 \pm 9 | | | | | |
| 4.310 \pm 9 | 4.37 | | 3.6 | 0 | 0 ⁺ , 1 ⁺ |
| | (4.73) | | | | |
| (5.062 \pm 11) | 4.86 | 5.04 | 0.7 | 1 | 0 ⁻ , 1 ⁻ , 2 ⁻ |
| | 5.16 | 5.19 | 1.0 | 1 | 0 ⁻ , 1 ⁻ , 2 ⁻ |
| | | 5.27 | 1.8 | 1 | 0 ⁻ , 1 ⁻ , 2 ⁻ |
| | 5.41 | | | | |
| | 5.54 | | | | |
| | | 5.72 | | | |
| | | 5.87 | 4.4 | 1 | 0 ⁻ , 1 ⁻ , 2 ⁻ |
| | | 5.95 | 9 | 1 | 0 ⁻ , 1 ⁻ , 2 ⁻ |

Table 20.5 from (1959AJ76): Proton groups from $^{19}\text{F}(\text{d}, \text{p})^{20}\text{F}$ (continued)

| E_x (MeV \pm keV) | E_x (MeV) | E_x (MeV) | $(2J + 1)\theta^2$ (%) | l_n | J^π |
|--------------------------|-------------------------|-------------------------|---------------------------|------------|-----------------|
| (1952WA1A) | (1957KH16) ^a | (1956EL1A) ^b | (1956EL1A) | (1956EL1A) | |
| | 6.07 | | | | |
| | 6.17 | 6.25 | | | |
| | 6.36 | | | | |
| | 6.47 | 6.52 | 9 | 1 | $0^-, 1^-, 2^-$ |
| | 6.65 | 6.63 | 5 | 1 | $0^-, 1^-, 2^-$ |
| | 6.74 | | | | |
| | | 6.81 | 7 | 1 | $0^-, 1^-, 2^-$ |
| | | 6.98 | | | |
| | | 7.20 | 4 | 1 | $0^-, 1^-, 2^-$ |

(1952WA1A): $E_d = 1.8$ MeV.

(1956EL1A): $E_d = 8.9$ MeV.

^a $E_d = 3.3$ to 4.0 MeV; errors ± 20 - 25 keV (1957KH16).

^b Levels 1-19 of ((1952WA1A) identified, but not measured; errors on remaining levels ± 20 keV (1956EL1A).

^c See also (1956TA1D, 1957ON1A, 1957SE1D).