Table 19.16 from (1978AJ03): Resonances in $^{18}\text{O}(p, n)^{18}\text{F}$

<table>
<thead>
<tr>
<th>$E_p$ (MeV ± keV)</th>
<th>$\Gamma_{\text{c.m.}}$ (keV)</th>
<th>Res. in yield of</th>
<th>$J^\pi$</th>
<th>$E_x$ in $^{19}\text{F}$ (MeV)</th>
<th>Refs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.643 ± 1.0</td>
<td>6.2 ± 0.5</td>
<td>n</td>
<td>$\frac{1}{2}^+$</td>
<td>10.496</td>
<td>(1969BE57, 1973BA31)</td>
</tr>
<tr>
<td>2.691 ± 1.0</td>
<td>2.5 ± 0.2</td>
<td>n</td>
<td>$\frac{5}{2}^+$</td>
<td>10.542</td>
<td>(1969BE57, 1973BA31)</td>
</tr>
<tr>
<td>2.717 ± 1.0</td>
<td>5.2 ± 0.5</td>
<td>n</td>
<td>$\frac{7}{2}^+$</td>
<td>10.566</td>
<td>(1969BE57, 1973BA31)</td>
</tr>
<tr>
<td>2.767 ± 1.5</td>
<td>4.7 ± 0.5</td>
<td>n</td>
<td>$\frac{7}{2}^+$</td>
<td>10.613</td>
<td>(1969BE57, 1973BA31)</td>
</tr>
<tr>
<td>2.923 ± 4</td>
<td>6 ± 3</td>
<td>n</td>
<td>$\frac{3}{2}^+$</td>
<td>10.858</td>
<td>(1969BE57, 1973BA31)</td>
</tr>
<tr>
<td>3.025 ± 2.0</td>
<td>24.0 ± 1.5</td>
<td>n</td>
<td>$\frac{5}{2}^+$</td>
<td>10.923</td>
<td>(1973BA31)</td>
</tr>
<tr>
<td>(3.08 ± 20)</td>
<td>≈ 60</td>
<td>n</td>
<td>$\frac{3}{2}^+$</td>
<td>10.974</td>
<td>(1973BA31)</td>
</tr>
<tr>
<td>3.148 ± 3</td>
<td>14 ± 2</td>
<td>n</td>
<td>$\frac{3}{2}^+$</td>
<td>10.989</td>
<td>(1969BE57, 1973BA31)</td>
</tr>
<tr>
<td>3.164 ± 2.5</td>
<td>7 ± 2</td>
<td>n</td>
<td>$\frac{5}{2}^+$</td>
<td>11.071</td>
<td>(1969BE57, 1973BA31)</td>
</tr>
<tr>
<td>3.250 ± 2.5</td>
<td>35 ± 4</td>
<td>n</td>
<td>$\frac{3}{2}^+$</td>
<td>11.184</td>
<td>(1973BA31)</td>
</tr>
<tr>
<td>3.370 ± 14</td>
<td>17 ± 4</td>
<td>n</td>
<td></td>
<td>11.184</td>
<td>(1973BA31)</td>
</tr>
<tr>
<td>3.463 ± 3</td>
<td>7 ± 2</td>
<td>n</td>
<td>$\frac{1}{2}^+$</td>
<td>11.272</td>
<td>(1973BA31)</td>
</tr>
<tr>
<td>3.470 ± 15</td>
<td>70 ± 20</td>
<td>n</td>
<td></td>
<td>11.279</td>
<td>(1973BA31)</td>
</tr>
<tr>
<td>3.653 ± 4</td>
<td>40 ± 10</td>
<td>n, n$_1$</td>
<td>$\frac{3}{2}^-$</td>
<td>11.452</td>
<td>(1973BA31)</td>
</tr>
<tr>
<td>3.680 ± 5</td>
<td>7 ± 3</td>
<td>n</td>
<td>$\frac{1}{2}^+$</td>
<td>11.478</td>
<td>(1973BA31)</td>
</tr>
<tr>
<td>3.725 ± 5</td>
<td>4 ± 2</td>
<td>n, n$_1$</td>
<td>$\frac{3}{2}^-$</td>
<td>11.502</td>
<td>(1973BA31)</td>
</tr>
<tr>
<td>3.748 ± 15</td>
<td>50 ± 15</td>
<td>n</td>
<td></td>
<td>11.542</td>
<td>(1973BA31)</td>
</tr>
<tr>
<td>3.775 ± 7</td>
<td>15 ± 10</td>
<td>n, n$_2$ (T = $\frac{3}{2}$)</td>
<td>11.568</td>
<td>(1973BA31)</td>
<td></td>
</tr>
<tr>
<td>(3.79 ± 20)</td>
<td>60 ± 20</td>
<td>n</td>
<td></td>
<td>11.58</td>
<td>(1973BA31)</td>
</tr>
<tr>
<td>3.863 ± 4</td>
<td>45 ± 10</td>
<td>n, n$_1$</td>
<td></td>
<td>11.651</td>
<td>(1973BA31)</td>
</tr>
<tr>
<td>4.00</td>
<td>n$_1$, n$_3$</td>
<td></td>
<td></td>
<td>(11.78)</td>
<td>(1969DI07)</td>
</tr>
<tr>
<td>4.06 ± 10$^d$</td>
<td>&lt; 50</td>
<td>n, n$_1$</td>
<td>$\frac{3}{2}^+$</td>
<td>11.84</td>
<td>(1964BA16, 1969DI07)</td>
</tr>
<tr>
<td>4.11</td>
<td>n$_1$</td>
<td></td>
<td>$\frac{3}{2}^+$</td>
<td>11.89</td>
<td>(1969DI07)</td>
</tr>
<tr>
<td>4.16 ± 10</td>
<td>90</td>
<td>n, n$_1$</td>
<td>$\frac{3}{2}^+$</td>
<td>11.93</td>
<td>(1964BA16, 1969DI07)</td>
</tr>
<tr>
<td>4.33</td>
<td>n$_1$, n$_3$</td>
<td></td>
<td></td>
<td>(12.09)</td>
<td>(1969DI07)</td>
</tr>
<tr>
<td>4.37 ± 10</td>
<td>100</td>
<td>n, n$_1$, n$_2$</td>
<td>$\frac{3}{2}^+$</td>
<td>12.13</td>
<td>(1964BA16, 1969DI07)</td>
</tr>
<tr>
<td>4.47</td>
<td>50</td>
<td>n, n$_1$, n$_2$, n$_3$</td>
<td>12.23</td>
<td>(1964BA16, 1969DI07)</td>
<td></td>
</tr>
<tr>
<td>4.58 ± 10</td>
<td>n$_1$</td>
<td></td>
<td>$\frac{3}{2}^+$</td>
<td>(12.33)</td>
<td>(1969DI07)</td>
</tr>
<tr>
<td>4.70</td>
<td>n$_3$</td>
<td></td>
<td>$\frac{3}{2}^+$</td>
<td>(12.44)</td>
<td>(1969DI07)</td>
</tr>
<tr>
<td>4.83</td>
<td>n$_1$, n$_2$, n$_3$</td>
<td></td>
<td></td>
<td>(12.57)</td>
<td>(1969DI07)</td>
</tr>
</tbody>
</table>
Table 19.16 from (1978AJ03): Resonances in $^{18}$O(p, n)$^{18}$F$^a$ (continued)

<table>
<thead>
<tr>
<th>$E_p$ (MeV $\pm$ keV)</th>
<th>$\Gamma_{c.m.}$ (keV)</th>
<th>Res. b in yield of</th>
<th>$J^\pi$</th>
<th>$E_x$ in $^{19}$F (MeV)</th>
<th>Refs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.90</td>
<td></td>
<td>$n_2$</td>
<td></td>
<td>(12.63)</td>
<td>(1969DI07)</td>
</tr>
<tr>
<td>5.05 ± 10</td>
<td>200</td>
<td>n, n$_1$, n$_2$</td>
<td></td>
<td>12.77</td>
<td>(1964BA16, 1969DI07, 1973FR10)</td>
</tr>
<tr>
<td>5.10</td>
<td></td>
<td>n$_1$, n$_2$</td>
<td></td>
<td>(12.82)</td>
<td>(1969DI07)</td>
</tr>
<tr>
<td>5.20</td>
<td></td>
<td>n$_2$, n$_3$</td>
<td></td>
<td>(12.92)</td>
<td>(1969DI07)</td>
</tr>
<tr>
<td>5.35</td>
<td></td>
<td>n, n$_1$, n$_2$, n$_3$</td>
<td></td>
<td>13.06</td>
<td>(1964BA16, 1969DI07)</td>
</tr>
<tr>
<td>5.47 ± 15</td>
<td>70</td>
<td>n, n$_1$</td>
<td></td>
<td>13.17</td>
<td>(1964BA16, 1969DI07)</td>
</tr>
<tr>
<td>5.622 ± 15</td>
<td>30</td>
<td>n, n$_1$, n$_2$</td>
<td>$(T = \frac{3}{2})$</td>
<td>13.317</td>
<td>(1969DI07, 1973FR10)</td>
</tr>
<tr>
<td>5.76</td>
<td></td>
<td>n$_1$, n$_3$</td>
<td></td>
<td>(13.45)</td>
<td>(1969DI07)</td>
</tr>
<tr>
<td>6.061 ± 15</td>
<td>50</td>
<td>n, n$_1$, n$_2$</td>
<td>$(T = \frac{3}{2})$</td>
<td>13.73</td>
<td>(1964BA16, 1969DI07, 1973FR10)</td>
</tr>
<tr>
<td>6.60 ± 15</td>
<td>350</td>
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<td></td>
<td>14.24</td>
<td>(1964BA16)</td>
</tr>
<tr>
<td>(6.70 ± 15)</td>
<td></td>
<td>n</td>
<td></td>
<td>(14.34)</td>
<td>(1964BA16)</td>
</tr>
<tr>
<td>7.17 ± 20</td>
<td>300</td>
<td>n</td>
<td></td>
<td>14.78</td>
<td>(1964BA16)</td>
</tr>
<tr>
<td>7.40 ± 20</td>
<td></td>
<td>n</td>
<td></td>
<td>15.00</td>
<td>(1964BA16)</td>
</tr>
<tr>
<td>(7.8)</td>
<td></td>
<td>n</td>
<td></td>
<td>(15.4)</td>
<td>(1964BA16)</td>
</tr>
<tr>
<td>(7.98)</td>
<td></td>
<td>n</td>
<td></td>
<td>(15.55)</td>
<td>(1964BA16)</td>
</tr>
<tr>
<td>8.19 ± 25</td>
<td>150</td>
<td>n</td>
<td></td>
<td>15.75</td>
<td>(1964BA16)</td>
</tr>
<tr>
<td>8.74 ± 25</td>
<td>200</td>
<td>n</td>
<td></td>
<td>16.27</td>
<td>(1964BA16)</td>
</tr>
<tr>
<td>9.30 ± 30</td>
<td></td>
<td>n</td>
<td></td>
<td>16.80</td>
<td>(1964BA16)</td>
</tr>
</tbody>
</table>

a See also Table 19.13 in (1972AJ02).
b n means total yield.
c See (1968BE34).
d Errors here and below are estimated from published data of (1964BA16) by H.B. Willard, private communication.