Y	E	$12C_5$	$12C_5^2$	$15C_2$	$20C_3$
A	1	1	1	1	1
$\Rightarrow T_1$	3				
T_2	3				
H	4				
$\Rightarrow$	5				

$$1^2+3^2+3^2+4^2+5^2 = \overbrace{1+9}^{10}+\overbrace{9+16+25}^{25} = 60$$

$SO(3)$. $\quad \ell = 0, 1, 2, 3, \ldots \quad \infty$

$-\ell \le m \le \ell \qquad \nu = 1, 3, 5, 7 \ldots$

$\nu = 2\ell+1$

$C(\varphi) \qquad T_\ell(\varphi) = \begin{pmatrix} e^{i\ell\varphi} & & & \\ & e^{i(\ell-1)\varphi} & & 0 \\ & & \ddots & \\ 0 & & & e^{-i\ell\varphi} \end{pmatrix}$ ℓ

$$\chi_\ell(\varphi) = \sum_{m=-\ell} e^{im\varphi} =$$

$$= \frac{e^{i(\ell+1)\varphi} - e^{-i\ell\varphi}}{e^{i\varphi} - 1} \cdot \frac{e^{-i\varphi/2}}{e^{-i\varphi/2}} =$$

$$= \frac{e^{i(\ell+1/2)\varphi} - e^{-i(\ell+1/2)\varphi}}{e^{i\varphi/2} - e^{-i\varphi/2}} = \frac{\sin\left(\frac{2\ell+1}{2}\varphi\right)}{\sin\varphi/2}$$

$\chi_0(\varphi) = 1$

$$T_2(\phi) = \begin{pmatrix} e^{i3\phi} & & & \\ & e^{i2\phi} & & \\ & & e^{i\phi} & \\ & & & 1 \\ & & & & e^{-i\phi} \\ & & & & & e^{-i2\phi} \\ & & & & & & e^{-i3\phi} \end{pmatrix}$$