

1-fermion (e.g. quark)	2-fermion (e.g. meson)	3-fermion (e.g. baryon)
$S = s = \frac{1}{2}, \quad S_z = m_s = \begin{cases} +1/2 \\ -1/2 \end{cases}$ $ S = 1, S_z = +1/2\rangle = \uparrow\rangle$ $ S = 1, S_z = -1/2\rangle = \downarrow\rangle$	Triplet, sym. $S = 1, \quad S_z = \begin{cases} +1 \\ 0 \\ -1 \end{cases}$ $ S = 1, S_z = +1\rangle = \uparrow\uparrow\rangle$ $ S = 1, S_z = 0\rangle = \frac{1}{\sqrt{2}}(\uparrow\downarrow\rangle + \downarrow\uparrow\rangle)$ $ S = 1, S_z = -1\rangle = \downarrow\downarrow\rangle$	$S = 3/2, \quad S_z = \begin{cases} +3/2 \\ +1/2 \\ -1/2 \\ -3/2 \end{cases}$ $ S = \frac{3}{2}, S_z = +\frac{3}{2}\rangle = \uparrow\uparrow\uparrow\rangle$ $ S = \frac{3}{2}, S_z = +\frac{1}{2}\rangle = \frac{1}{\sqrt{3}}(\uparrow\uparrow\downarrow\rangle + \uparrow\downarrow\uparrow\rangle + \downarrow\uparrow\uparrow\rangle)$ $ S = \frac{3}{2}, S_z = -\frac{1}{2}\rangle = \frac{1}{\sqrt{3}}(\uparrow\downarrow\downarrow\rangle + \downarrow\uparrow\downarrow\rangle + \downarrow\downarrow\uparrow\rangle)$ $ S = \frac{3}{2}, S_z = -\frac{3}{2}\rangle = \downarrow\downarrow\downarrow\rangle$
		Sym. (1 ↔ 2) $S = 1/2, \quad S_z = \begin{cases} +1/2 \\ -1/2 \end{cases}$ $ S = \frac{1}{2}, S_z = +\frac{1}{2}\rangle_s = \frac{1}{\sqrt{6}}(-2 \uparrow\uparrow\downarrow\rangle + \uparrow\downarrow\uparrow\rangle + \downarrow\uparrow\uparrow\rangle)$ $ S = \frac{1}{2}, S_z = -\frac{1}{2}\rangle_s = \frac{1}{\sqrt{6}}(-2 \downarrow\downarrow\uparrow\rangle + \downarrow\uparrow\downarrow\rangle + \uparrow\downarrow\downarrow\rangle)$
	Singlet, antisym. $S = 0, \quad S_z = 0$ $ S = 0, S_z = 0\rangle = \frac{1}{\sqrt{2}}(\uparrow\downarrow\rangle - \downarrow\uparrow\rangle)$	Antisym. (1 ↔ 2) $S = 1/2, \quad S_z = \begin{cases} +1/2 \\ -1/2 \end{cases}$ $ S = \frac{1}{2}, S_z = +\frac{1}{2}\rangle_A = \frac{1}{\sqrt{2}}(\uparrow\downarrow\uparrow\rangle - \downarrow\uparrow\uparrow\rangle)$ $ S = \frac{1}{2}, S_z = -\frac{1}{2}\rangle_A = \frac{1}{\sqrt{2}}(\uparrow\downarrow\downarrow\rangle - \downarrow\uparrow\downarrow\rangle)$