symmetric in 2 indices and antisymmetric in 2 indices

quarks in 1S \{1, 1, 11, 12, 14, 13, 17, 20, 27\}
spin mixed \{2, 3, 2, 2\}
to make the 8 dimensional total wavefunction antisymmetric.

color antisymmetric.

completely antisymmetric

dimensional

\[ \Rightarrow 27 = 10 \otimes 8 \otimes 8 + 1 \]

notice that
\[ T_{i_1 i_2 i_3} + T_{i_2 i_3 i_1} \]
\[ -T_{i_1 i_3 i_2} - T_{i_2 i_1 i_3} \]

and
\[ T_{i_1 i_2 i_3} - T_{i_3 i_1 i_2} + T_{i_2 i_3 i_1} - T_{i_3 i_2 i_1} \]

are independent (different order of symmetrization and anti-symmetrization)

there is only one \( \square \) and one \( \square \)