Impact of the Pauli blocking and particle exchange on the four-body system

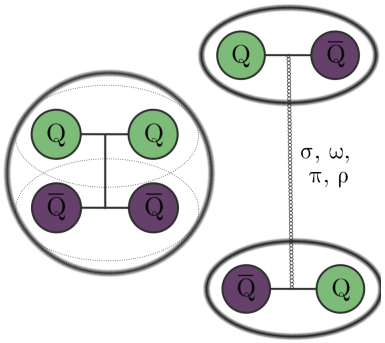
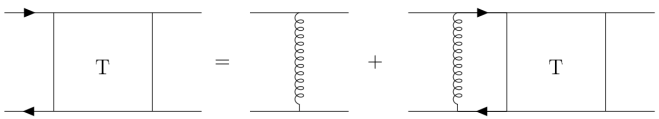


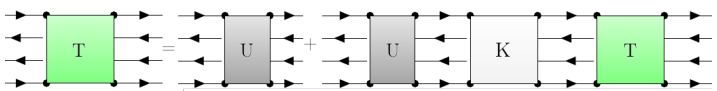
Fig: Possible tetraquark structures

We start with solving of the two-particle Bethe-Salpeter equation for meson/exciton.



The T-matrix fulfills BSE in the ladder approximation.

$$T_{ij} = V_{ij} + V_{ij} G^0_{ij} T_{ij} = \frac{V_{ij}}{1 - \Pi^{cl}_{ij}}$$



U includes all possible interaction between the pairs and K includes all possible quark exchanges.
K is dependent on the wave function ansatz.

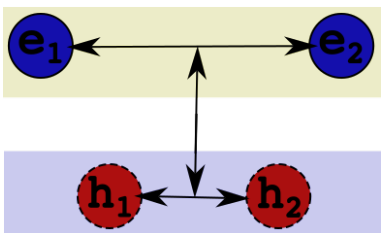


Fig: The structure of the biexciton