

Questo si può vedere dalla 42 considerando che per $A-2$ particelle si ha:

$$|\bar{\Phi}\rangle_{k\ell}^{A-2} = \det \left\{ \prod_{i=1}^{A-2} a_i^\dagger |0\rangle \right\} \frac{1}{(A-2)!} = a_\ell a_k |\bar{\Phi}_0\rangle$$

$$E_0 - E_{k\ell} = \left\{ \sum_{i=1}^A \epsilon_i - \frac{1}{2} \sum_{i,j} \bar{V}_{ijij} \right\} - \left\{ \sum_{\substack{i=1 \\ i \neq k \\ i \neq \ell}}^A \epsilon_i - \frac{1}{2} \sum_{\substack{i,j \\ i \neq k\ell \\ j \neq k\ell}} \bar{V}_{ijij} \right\}$$

$$= \epsilon_k + \epsilon_\ell - \frac{1}{2} \bar{V}_{k\ell k\ell} \quad .$$