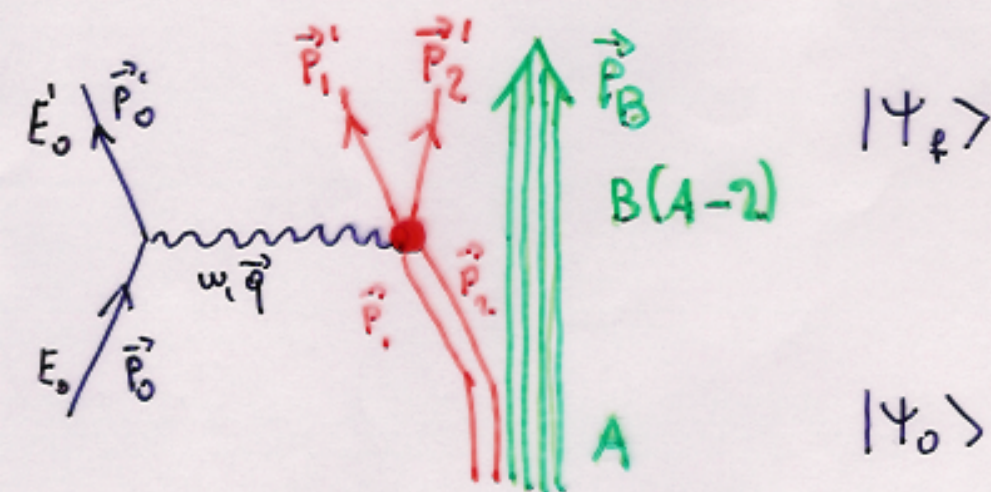


TWO-NUCLEON KNOCKOUT (ee' NN)



$$q_\mu^2 = \omega^2 - \vec{q}^2$$

$$E_m = \omega - \frac{\vec{p}_1'^2}{2m} - \frac{\vec{p}_2'^2}{2m} - \frac{\vec{p}_B^2}{2m(A-2)} = W_B^* - W_A \quad \text{missing energy}$$

$$\vec{p}_m = \vec{q} - \vec{p}_1' - \vec{p}_2' = -\vec{p} = -(\vec{p}_1 + \vec{p}_2) = \vec{p}_B \quad \text{missing momentum}$$

TWO-HOLE SPECTRAL DENSITY FUNCTION

$$S(\vec{p}_1, \vec{p}_2, \vec{p}_1, \vec{p}_2, E_m) = \langle \psi_0 | a_{\vec{p}_2}^\dagger a_{\vec{p}_1}^\dagger \delta(E_m - H) a_{\vec{p}_1} a_{\vec{p}_2} | \psi_0 \rangle$$

$$\int S(\vec{p}_1, \vec{p}_2, \vec{p}_1, \vec{p}_2, E_m) dE_m = \rho_2(\vec{p}_1, \vec{p}_2, \vec{p}_1, \vec{p}_2) \quad \text{TWO-BODY DENSITY}$$

$$\vec{p}_1 = \vec{p}_1, \vec{p}_2 = \vec{p}_2 \Rightarrow \rho_2(\vec{p}_1, \vec{p}_2, \vec{p}_1, \vec{p}_2) \Rightarrow \rho_2(\vec{r}_1, \vec{r}_2, \vec{r}_1, \vec{r}_2) = \rho(\vec{r}_1, \vec{r}_2)$$

PAIR CORRELATION FUNCTION

$$\rho(\vec{r}_1, \vec{r}_2) = \int |\psi_0(\vec{r}_1, \vec{r}_2, \vec{r}_3, \dots, \vec{r}_A)|^2 d\vec{r}_3 \dots d\vec{r}_A$$