goldstone

$$a_p \equiv \stackrel{p}{\downarrow} \qquad a_p^{\dagger} \equiv \stackrel{\downarrow}{\stackrel{\bullet}{p}} \qquad b_a \equiv \stackrel{a}{\stackrel{\bullet}{\downarrow}} \qquad b_i^{\dagger} \equiv \stackrel{\downarrow}{\stackrel{\bullet}{a}} \qquad b_i^{\dagger} \equiv \stackrel{\downarrow}{\stackrel{\bullet}{a}} \qquad b_i^{\dagger} \equiv \stackrel{\downarrow}{\stackrel{\bullet}{a}} \qquad (1)$$

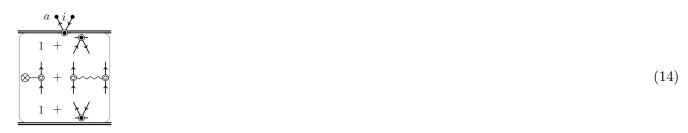
$$a_{q_1q_2\cdots q_n}^{p_1p_2\cdots p_n} \equiv \begin{cases} p_1 & p_2 & p_n \\ \vdots & \vdots & \vdots \\ q_1 & q_2 & q_n \end{cases} \qquad \tilde{a}_{q_1q_2\cdots q_n}^{p_1p_2\cdots p_n} \equiv \begin{cases} p_1 & p_2 & p_n \\ \vdots & \vdots & \vdots \\ q_1 & q_2 & q_n \end{cases}$$
 (2)

$$\left(\frac{1}{n!}\right)^{2} v_{p_{1} p_{2} \cdots p_{n}}^{q_{1} q_{2} \cdots q_{n}} \tilde{a}_{q_{1} q_{2} \cdots q_{n}}^{p_{1} p_{2} \cdots p_{n}} \equiv \boxed{\boldsymbol{v}} - \boldsymbol{\phi} \qquad (3)$$

$$h_p^q a_q^p \equiv \boxtimes - \uparrow \tag{4}$$

$$\boxtimes \stackrel{\downarrow}{\longrightarrow} = \boxtimes \stackrel{\downarrow}{\longrightarrow} + \boxtimes \stackrel{\downarrow}{\longrightarrow} + \boxtimes \stackrel{\downarrow}{\longrightarrow}$$
 (6)

$$\frac{1}{4}\overline{g}_{pq}^{rs}a_{rs}^{pq} =$$



$$(15)$$

$$E^{(2)} = \boxed{ }$$