# goldstone

$$a_p \equiv \;\; \overset{p}{\underset{}{\circ}} \qquad a_p^\dagger \equiv \;\; \underset{p}{\circ} \qquad b_a \equiv \;\; \overset{a}{\bullet} \qquad b_i \equiv \;\; \overset{i}{\bullet} \qquad b_a^\dagger \equiv \;\; \underset{a}{\bullet} \qquad b_i^\dagger \equiv \;\; \underset{i}{\bullet} \tag{1}$$

$$a^{p_1 p_2 \cdots p_n}_{q_1 q_2 \cdots q_n} \equiv \quad\quad\quad\quad \tilde{a}^{p_1 p_2 \cdots p_n}_{q_1 q_2 \cdots q_n} \equiv \tag{2}$$

$$\left(\tfrac{1}{n!}\right)^2 v^{q_1 q_2 \cdots q_n}_{p_1 p_2 \cdots p_n} \, \tilde{a}^{p_1 p_2 \cdots p_n}_{q_1 q_2 \cdots q_n} \equiv \;\; \boxed{\boldsymbol{v}} \tag{3}$$

$$h^q_p a^p_q \equiv \tag{4}$$

$$\tag{5}$$

$$\tag{6}$$

$$\tfrac{1}{4} \overline{g}^{rs}_{pq} a^{pq}_{rs} = \tag{7}$$

$$\tag{8}$$

$$\tag{9}$$

$$\boxed{} + \cdots = E_0 + \otimes + \qquad\qquad E_0 \equiv \boxed{} + \qquad\qquad \otimes \equiv \boxed{} + \tag{10}$$

$$\tag{11}$$

$$\tag{12}$$

$$(13)$$



$$(14)$$