$$\partial_k R_{k,ij}(p_1, p_2)$$

$G_{k,jk}(p_2, p_3)$ $G_{k,ni}(p_6, p_1)$

p_2 p_1

p_3 p_6

q_1 q_2

φ_a φ_b

p_4 p_5

$\Gamma^{(3)}_{k,akl}(q_1, p_3, -p_4)$ $\Gamma^{(3)}_{k,bmn}(-q_2, p_5, -p_6)$

$G_{k,lm}(p_4, p_5)$

$G_{k,nk}(p_6, p_3)$

$\Gamma^{(3)}_{k,akl}(q_1, p_3, -p_4)$ $\Gamma^{(3)}_{k,bmn}(-q_2, p_5, -p_6)$

q_1 φ_a p_3 p_6 q_2 φ_b

p_4 p_5

$G_{k,li}(p_4, p_1)$ p_1 p_2 $G_{k,jm}(p_2, p_5)$

$\partial_k R_{k,ij}(p_1, p_2)$

$$\partial_k R_{k,ij}(p_1, p_2)$$

$$p_2 \qquad p_1$$

$$G_{k,jk}(p_2, p_3) \qquad\qquad G_{k,li}(p_4, p_1)$$

$$p_3 \qquad p_4$$

$$q_1 \qquad\qquad q_2$$

$$\varphi_a \qquad \Gamma_{k,abkl}^{(4)}(q_1, -q_2, p_3, -p_4) \qquad \varphi_b$$