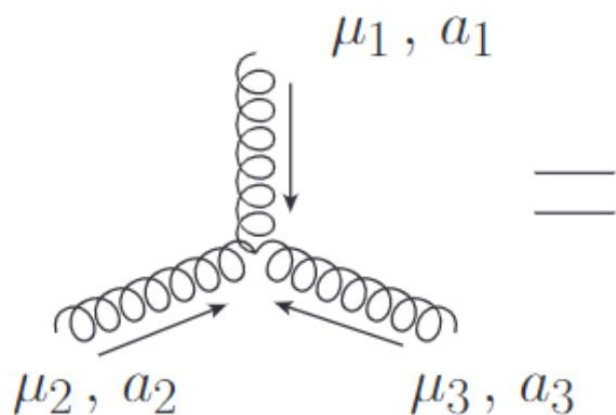
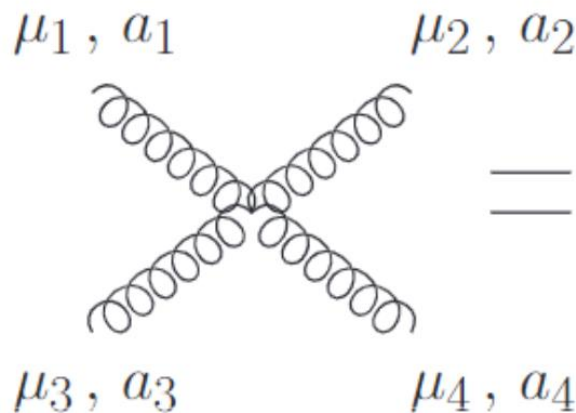


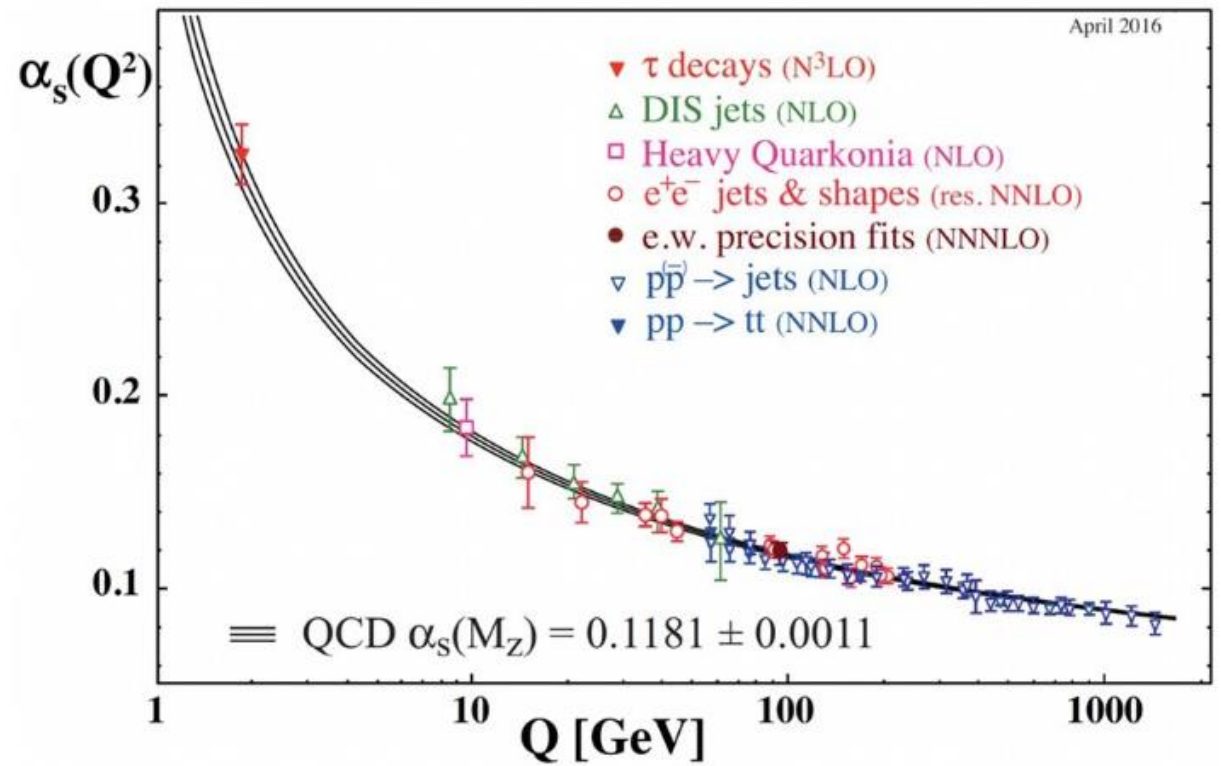
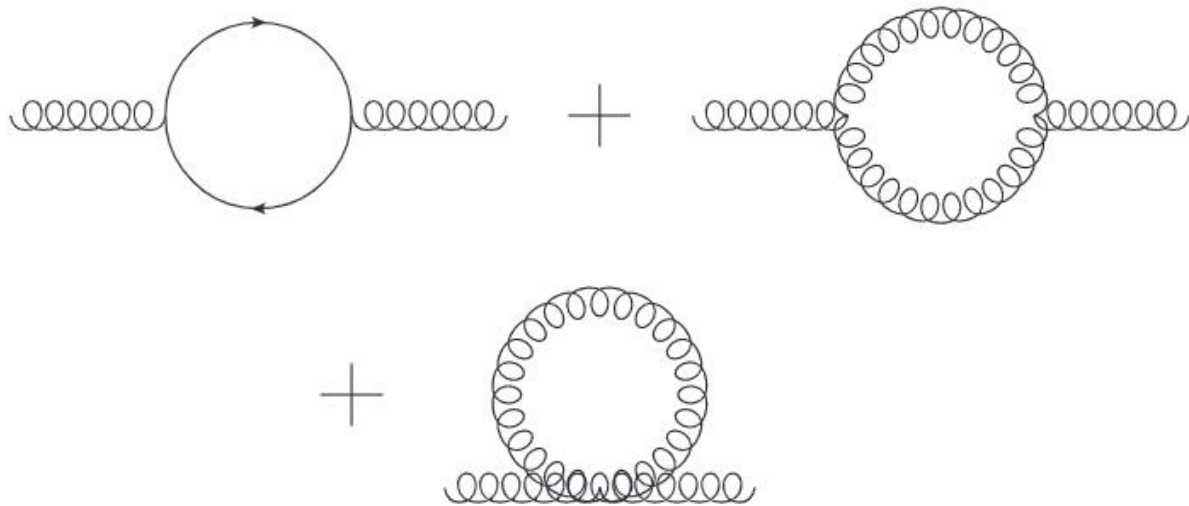
$$= ig\gamma_\mu t^a$$



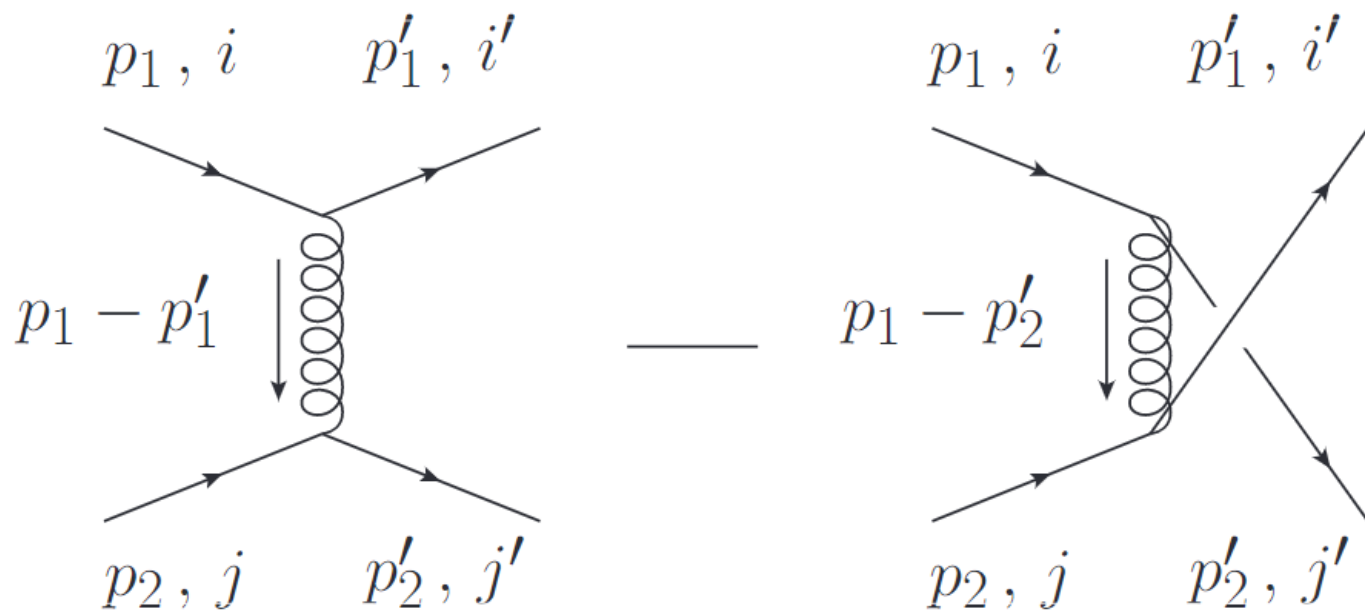
$$= gf^{a_1 a_2 a_3} [g^{\mu_1 \mu_2} (k_1 - k_2)^{\mu_3} + g^{\mu_2 \mu_3} (k_2 - k_3)^{\mu_1} + g^{\mu_3 \mu_1} (k_3 - k_1)^{\mu_2}]$$



$$= -ig^2 [f^{a_1 a_2 b} f^{a_3 a_4 b} (g^{\mu_1 \mu_3} g^{\mu_2 \mu_4} - g^{\mu_1 \mu_4} g^{\mu_2 \mu_3}) + f^{a_1 a_3 b} f^{a_2 a_4 b} (g^{\mu_1 \mu_2} g^{\mu_3 \mu_4} - g^{\mu_1 \mu_4} g^{\mu_2 \mu_3}) + f^{a_1 a_4 b} f^{a_2 a_3 b} (g^{\mu_1 \mu_2} g^{\mu_3 \mu_4} - g^{\mu_1 \mu_3} g^{\mu_2 \mu_4})]$$

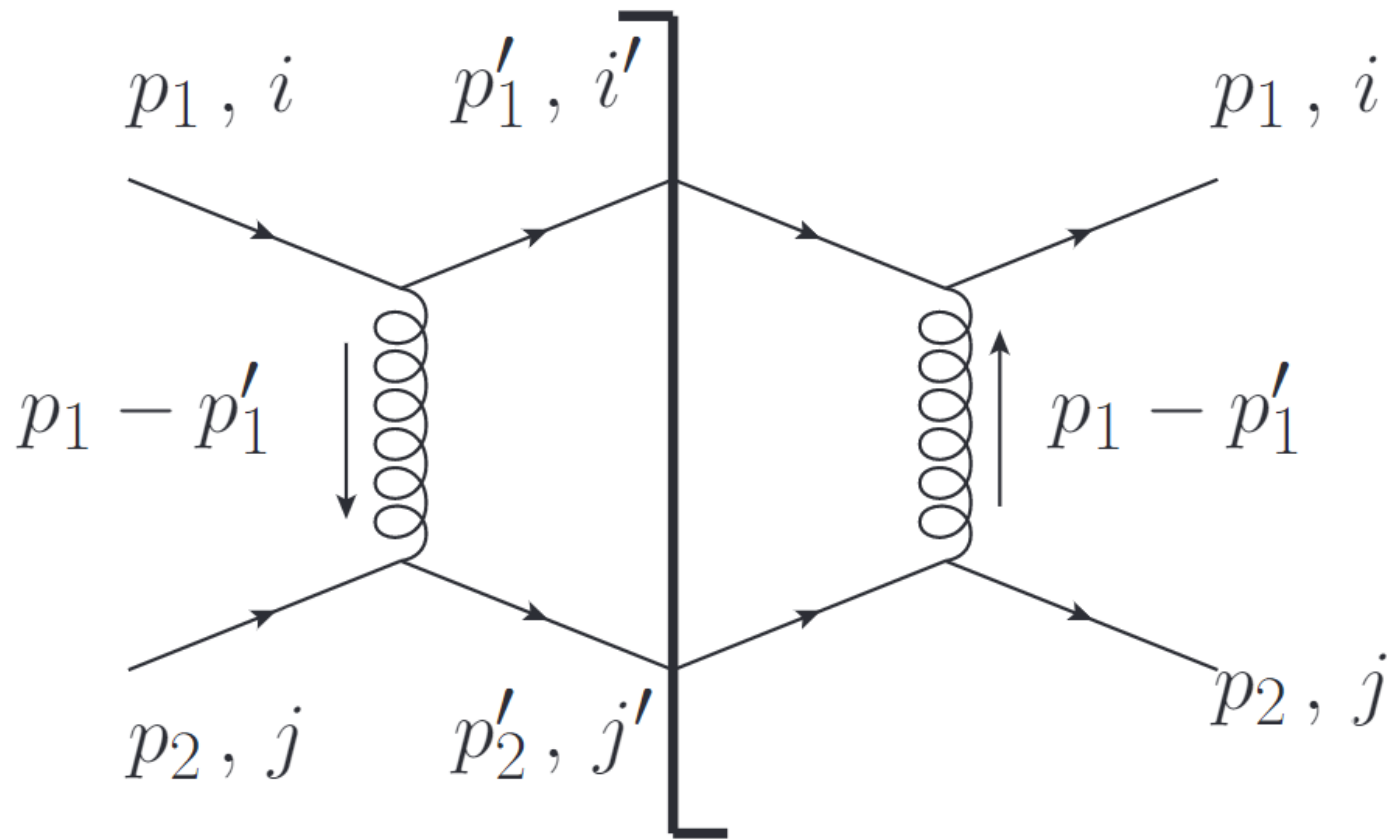


$$\beta_g = \frac{g^3}{(4\pi)^2} \left(\frac{2}{3} N_f - 11 \right)$$



$$i\mathcal{M}_t = \frac{ig^2}{t} (t^a)_{i'i} (t^a)_{j'j} [\bar{u}'_1 \gamma_\mu u_1] [\bar{u}'_2 \gamma^\mu u_2]$$

$$i\mathcal{M}_u = \frac{-ig^2}{u} (t^a)_{j'i} (t^a)_{i'j} [\bar{u}'_1 \gamma_\mu u_2] [\bar{u}'_2 \gamma^\mu u_1]$$



$$\langle \mathcal{M}^2 \rangle \approx 4g^4 \frac{C_F}{2N_c} \frac{s^2}{t^2}$$

$$\frac{d\sigma}{d^2 p'_{1\perp}} = 4\alpha_s^2 \frac{C_F}{2N_c} \frac{1}{p'^4_{1\perp}}$$