

$$\frac{\mathrm{d}N_g(\boldsymbol{b}_\perp)}{\mathrm{d}^2\boldsymbol{p}_{g\perp}\mathrm{d}y_g} = \frac{\alpha_s}{(\sqrt{2}\pi)^6 C_F p_{g\perp}^2} \int_{\boldsymbol{k}_{1\perp}, \boldsymbol{R}_\perp} \phi^p(x_p; \boldsymbol{k}_{1\perp}; \boldsymbol{R}_\perp) \phi^A(x_A; \boldsymbol{p}_{g\perp} - \boldsymbol{k}_{1\perp}; \boldsymbol{R}_\perp - \boldsymbol{b}_\perp)$$