

$$P_{22}(k) = 2 \int \frac{d^3 q}{(2\pi)^3} P_L(q) P_L(|\mathbf{k} - \mathbf{q}|) \left[F_2^{(s)}(\mathbf{q}, \mathbf{k} - \mathbf{q}) \right]^2$$

$$\begin{aligned} 2P_{13}(k) &= \frac{2\pi k^2}{252} P_L(k) \int_0^\infty \frac{dq}{(2\pi)^3} P_L(q) \\ &\times \left[100 \frac{q^2}{k^2} - 158 + 12 \frac{k^2}{q^2} - 42 \frac{q^4}{k^4} \right. \\ &\left. + \frac{3}{k^5 q^3} (q^2 - k^2)^3 (2k^2 + 7q^2) \ln \left(\frac{k+q}{|k-q|} \right) \right] \end{aligned}$$