

Born equation

$$\frac{2s}{\pi\alpha^2} \frac{d\sigma}{d\cos\theta} (e^+e^- \rightarrow f\bar{f}) = \left| \frac{1}{1 - \Delta\alpha} \right|^2 (1 + \cos^2\theta)$$

$$+ 4 \operatorname{Re} \left\{ \frac{2}{1 - \Delta\alpha} \chi(s) \left[\hat{g}_v^e \hat{g}_v^f (1 + \cos^2\theta) + 2 \hat{g}_a^e \hat{g}_a^f \cos\theta \right] \right\}$$

$$+ 16 |\chi(s)|^2 \left[(\hat{g}_a^{e^2} + \hat{g}_v^{e^2})(\hat{g}_a^{f^2} + \hat{g}_v^{f^2})(1 + \cos^2\theta) + 8 \hat{g}_a^e \hat{g}_a^f \hat{g}_v^e \hat{g}_v^f \cos\theta \right]$$