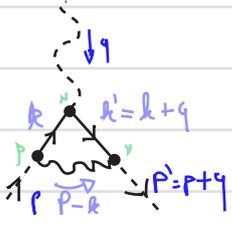


1

Starting to the expression on the top of pg 110 of the lecture notes:



The diagram shows a triangle loop with a photon (dashed line) and two fermions (solid lines). The external momenta are \$q\$ (incoming), \$p\$ (incoming), and \$p+q\$ (outgoing). The loop momenta are \$k\$ (top), \$k+q\$ (right), and \$k-p\$ (bottom). The fermion masses are \$m\$.

$$= -e^3 \int \frac{d^4 k}{(2\pi)^4} \frac{\gamma^\nu (\not{k} + \not{q} + m) \gamma^\mu (\not{k} + m) \gamma^\rho}{[\underbrace{(k+q)^2 - m^2}_b] [\underbrace{k^2 - m^2}_a] [\underbrace{(k-p)^2 - m^2}_c]}$$

show that it can be put in the form: $-ie \left[\gamma^{\mu\nu} \delta F_1(q^2) + \frac{i \sigma^{\mu\nu} q_\rho}{2m} \delta F_2(q^2) \right]$

and that δF_1 and δF_2 are given by eqs. 111.1 and 110.1 respectively.