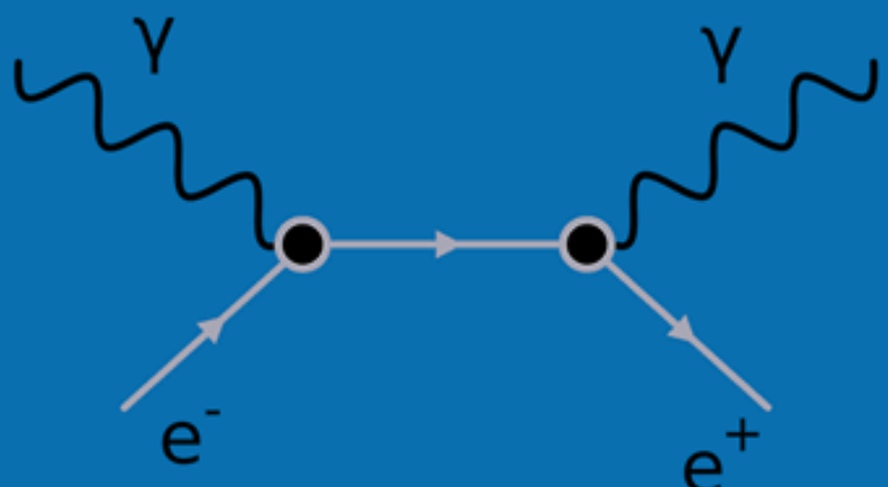
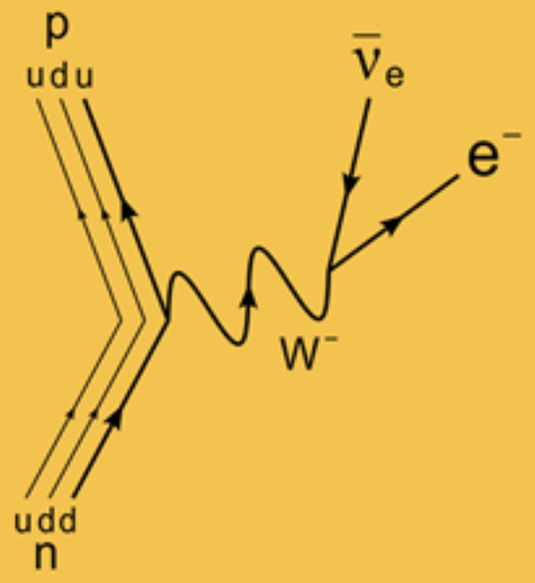
$$\mathcal{L} = \bar{\psi}\left(i\gamma^{\mu}D_{\mu} - m\right)\psi - \frac{1}{4}F_{\mu\nu}F^{\mu\nu}$$



Electromagnetismo

$$\mathcal{L} = g\,(\bar{\nu}_{eL}, \bar{e})\,\gamma^{\mu}\left\{\begin{pmatrix} -\sqrt{1+\xi^2}Z_{\mu} & 0 \\ 0 & \frac{\xi A_{\mu}}{\sqrt{1+\xi^2}} - \frac{\xi^2}{\sqrt{1+\xi^2}}Z_{\mu} \end{pmatrix} + \frac{1-\gamma^5}{4}\begin{pmatrix} -\sqrt{1+\xi^2}Z_{\mu} & -\sqrt{2}W_{\mu}^{+} \\ -\sqrt{2}W_{\mu} & \sqrt{1+\xi^2}Z_{\mu} \end{pmatrix}\right\}\begin{pmatrix} \nu_{eL} \\ e \end{pmatrix}$$



Forza nuclear feble