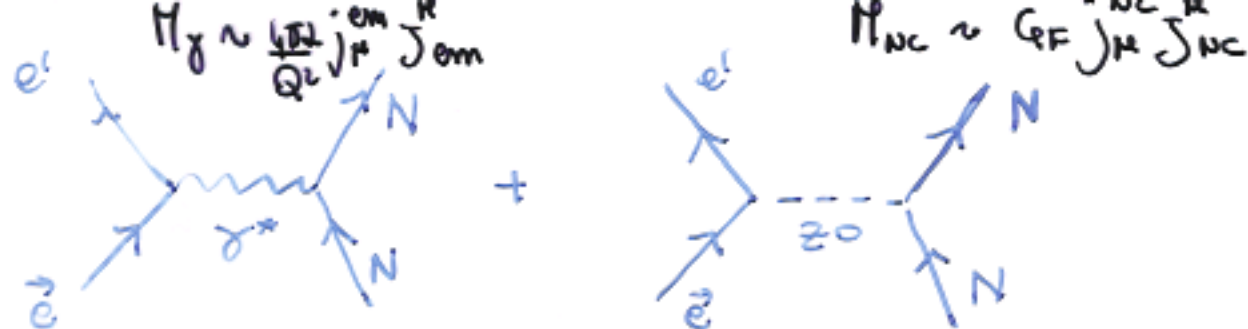




using electrons with opposite helicities

$$\left(\frac{d\sigma}{d\Omega d\epsilon'} \right)^{PC} = \frac{1}{2} \left(\frac{d\sigma^+}{d\Omega d\epsilon'} + \frac{d\sigma^-}{d\Omega d\epsilon'} \right) \sim |M_\gamma|^2 \sim \gamma_{\mu\nu}^{PC} W_{\mu\nu}^{N\gamma}$$

$$\left(\frac{d\sigma}{d\Omega d\epsilon'} \right)^{PV} = \frac{1}{2} \left(\frac{d\sigma^+}{d\Omega d\epsilon'} - \frac{d\sigma^-}{d\Omega d\epsilon'} \right) \sim M_\gamma^* M_{NC} \sim \gamma_{\mu\nu}^{PV} W_{\mu\nu}^{N\gamma} \quad (ERC)$$

$$\gamma_{\mu\nu}^{PV} = \bar{\psi} j_\mu^{em} \psi j_\nu^{NC} \sim R [\overset{i\epsilon_{\mu\nu\rho\sigma} k^\rho e'^\sigma}{\gamma_\mu^S} g_V - \gamma_\mu g_A]$$

$$W_{\mu\nu}^{N\gamma} = \bar{\psi} j_\mu^{em} \psi j_\nu^{NC} \sim \underbrace{j_\mu^{em} V_\nu^{NC}}_{W^{N\gamma}(V)} + \underbrace{j_\mu^{em} A_\nu^{NC}}_{W^{N\gamma}(A)}$$

→ weak NC form factors

$$\lambda = \frac{d\sigma^{PV}}{d\sigma^{PC}} \text{ is mostly sensitive to } V_{NC}^\mu \Rightarrow F_{1,2}^S$$

$$d\sigma^{PV} \sim \underbrace{g_V}_{\sim 1 - 4\sin^2\theta_W \approx 0.08} \gamma_\mu^S \gamma_\nu^{N\gamma} W^{N\gamma}(A) + \underbrace{g_A}_{\sim 1} \gamma_\mu \gamma_\nu^{N\gamma} W^{N\gamma}(V)$$