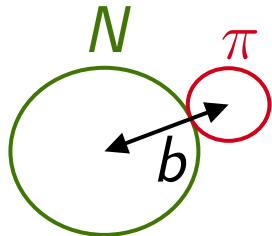


Only two parameters



$\{S, b\}$

$$\Psi_N = \begin{pmatrix} \psi_N \\ \psi_{N\pi} \\ \psi_{N\pi\pi} \\ \vdots \end{pmatrix}$$

$$\hat{W}^\dagger \begin{matrix} \curvearrowright \psi_N \\ \psi_{N\pi} \curvearrowright \end{matrix} \hat{W}$$

$$H\Psi_N = E\Psi_N,$$

where

$$H = \begin{pmatrix} \hat{K}_N & \hat{W}^\dagger \\ \hat{W} & \hat{K}_N + \hat{K}_\pi + m_\pi \end{pmatrix}$$

and

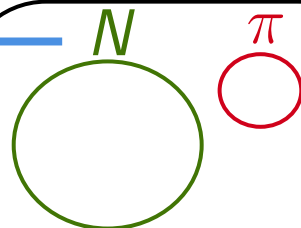
$$\hat{W} = (\vec{\tau} \cdot \vec{\pi})(\vec{\sigma} \cdot \vec{r})f(r)$$

$\{S, b\}$

Extract parameters

$$\frac{d\sigma}{d\Omega} \begin{cases} p\gamma \rightarrow \pi^0 p \\ n\gamma \rightarrow \pi^0 n \\ p\gamma \rightarrow \pi^+ n \\ n\gamma \rightarrow \pi^- p \end{cases}$$

$$\sigma$$



$$d\omega = \frac{2\pi}{\hbar} |\mathcal{M}|^2 \rho$$

Inspired by disintegration