

→ FSI : distorted wave

• partial wave expansion

$$\psi_F(\vec{r}) = 4\pi \sqrt{\frac{E_N + M_N}{2M_N}} \sum_{k,m,m_e} e^{-i\delta_k^*} i^l \langle l m_e \frac{1}{2} s m | j m \rangle \\ \times Y_{lm}^*(\hat{p}_N) \psi_k^{lm}(\vec{r})$$

• SOLUTION OF DIRAC EQUATION WITH U_s, U_v, U_c

$U_{s,v} \rightarrow$ phenomenological OPTICAL POTENTIALS

{ REAL PART $\rightarrow$ scattering
IMAGINARY PART $\rightarrow$ absorption

full ROP

SUCCESSFULLY USED IN $(e,e'N)$

BUT $\rightarrow$? EXTRAPOLATION TO ?
INCLUSIVE PROCESSES

$\rightarrow$ SET IMAGINARY PART TO ZERO real ROP

• ALTERNATIVE (SMALL ENERGY TRANSFER)

RELATIVISTIC MEAN FIELD

RMF

$\rightarrow$ SAME DIRAC EQ. AS FOR BOUND WAVE FUNCTIONS