

YHAL E19 020 P 03

$$\varphi_{E,j,u}^{(1)}(r) \cong N_0 \sqrt{j} \cdot 2j \sqrt{\varepsilon' + 1} r^{j-1}$$

$$\varphi_{E,j,u}^{(2)}(r) \cong 0 \quad \text{for } j > 0$$

and $\varphi_{E,j,u}^{(1)}(r) \cong 0$

$$\varphi_{E,j,u}^{(2)}(r) \cong N_0 2j \sqrt{\varepsilon' - 1} r^{j-1} \quad \text{for } j < 0$$

where $N_0^2 = \frac{1}{8\pi mc^2} \cdot \frac{1}{P(2j+1)} \cdot \left(\frac{4\pi mc^2}{\hbar}\right)^{2j+1}$

$$\eta' 2j! - 1 \{(2j-1)!\}^2$$

$$\varepsilon' = \frac{E'}{mc^2}, \quad \eta' = \sqrt{\varepsilon'^2 - \kappa^2}$$

$$\kappa = \frac{\mu}{m}$$

$\kappa \rightarrow 0$

$$g^2 \left\{ \left(\frac{1+\delta}{2} \right) \left| \int U_0(r) dr \right|^2 + \left(\frac{1-\delta}{2} \right) \left| \int U'(r) dr \right|^2 \right\}$$