

$$f(\dot{r}) e^{r/a}$$

I.

$$U(r) = \begin{cases} 0, & r > a \\ U_0, & r < a \end{cases}$$

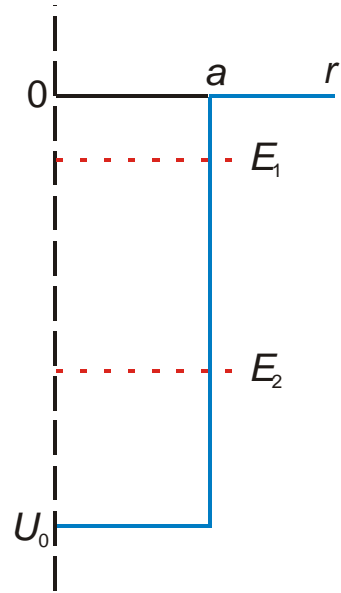
II.

$$e^{-r/a}, \quad \frac{\eta}{\sqrt{2m|E|}}$$

III.

$$E_n = \frac{E_1}{n^2}, \quad \psi_n(r) = C_n r^{n-1} \exp\left(-\frac{r}{na_B}\right) \quad (n = 1, 2, 3, \dots)$$

$$a_B = \frac{\hbar^2}{m^* e^2}$$



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$$\frac{1}{ij} F(ij, f_i, f_j) |M_q|^2 (\eta_{qs} \quad ij) d^3 q F(ij, f_i, f_j) \left| \int_j^* e^{iqr} \int_i d^3 r \right|^2$$

$$f_i = \left(\exp \frac{-i}{T} - 1 \right)^{-1}$$

$$ij = \left(\exp \frac{-ij}{T} - 1 \right)^{-1}$$

ij *i* *j*

