

Typické hodnoty su:

$$v = 2 \times 10^7 \text{ m s}^{-1}$$

$$R = 10^{-14} \text{ m}$$

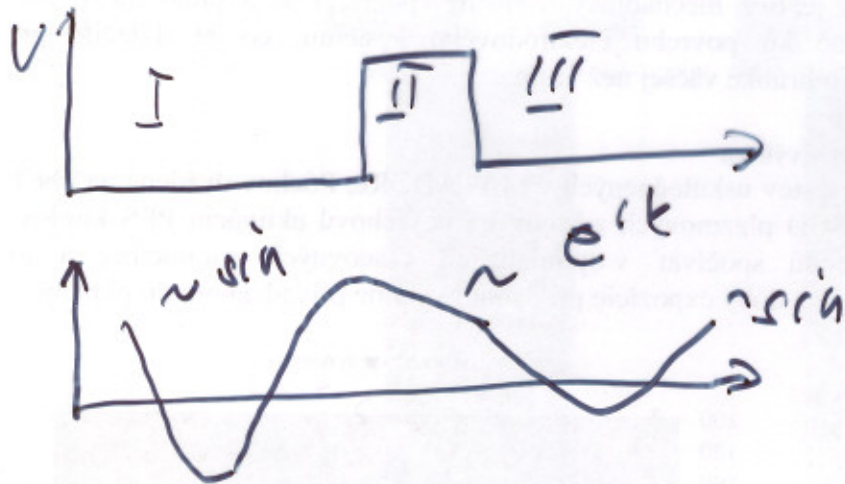
$$\Rightarrow v = 10^{21} \text{ Hz}$$

Ak počas rozpadu je  $10^{20}$  rokov  $\sim 10^{17}$  s

$\Rightarrow$   $\alpha$  častica rozpadne  $10^{38}$  raz

Ak  $v > E \Rightarrow$  k.f. :  $P=0$   
 g.f. :  $P \neq 0$

### PRIENIK POTENCIÁLOVÉ BARIÉRY.



$$\frac{\partial^2 \psi_I}{\partial x^2} + \frac{2m}{\hbar^2} \psi_I = 0$$

$$\frac{\partial^2 \psi_{III}}{\partial x^2} + \frac{2m}{\hbar^2} \psi_{III} = 0$$

$$\Rightarrow \psi_I = A e^{iax} + B e^{-iax} \quad \text{vlna idúca} \leftarrow \quad E=0$$

$$\psi_{III} = F e^{iax} + G e^{-iax} \quad \text{po idúcich vlnach} \rightarrow$$

$\leftarrow$  prejdeca vlna  $\psi_{III} + \psi_I \rightarrow$   
 vlna dopadajúca z kľuč  $\psi_I +$

$$\psi_I = \psi_{I+} + \psi_{I-}$$

$$\psi_{II} = \psi_{III+}$$

$$a = \sqrt{\frac{2mT}{\hbar^2}}$$