

Só a partícula α é emitida
 \Rightarrow espectro de energia é discreto.

Energias típicas são da ordem de
 $\sim 4-6$ MeV

pois a transmissão em barreiras de potencial é função da energia.

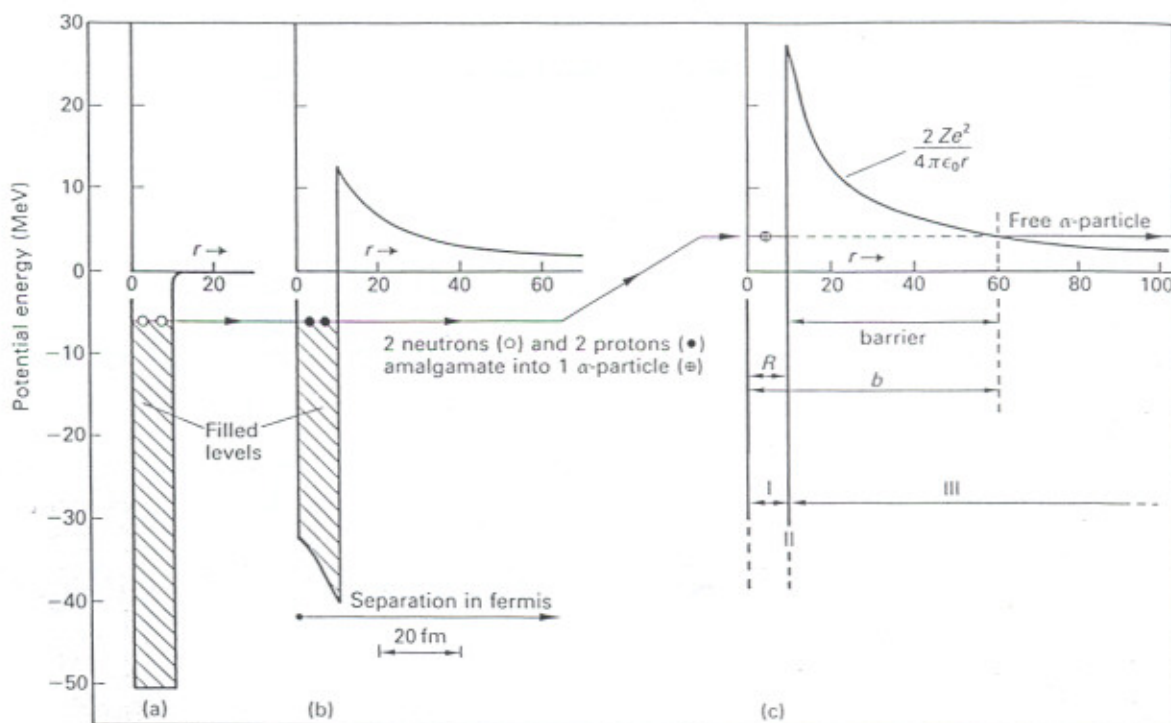


Fig. 6.2 Diagrams of the form of the potential energy versus distance r from the nuclear centre for (a) neutrons and (b) protons in and near a nucleus of $Z=90$, $A \approx 236$. The changing of two protons and two neutrons as they amalgamate to form

an α -particle is shown. If an α -particle is formed, then it is presumed to have a potential energy as a function of distance, as shown in (c). The regions I, II, and III are described in the text.

• Probabilidade de transmissão p/ efeito de túnel:

$$T(E) \approx e^{-2Kt}, \quad \text{e) } K = \frac{1}{\hbar} \sqrt{2M(U-E)}$$

