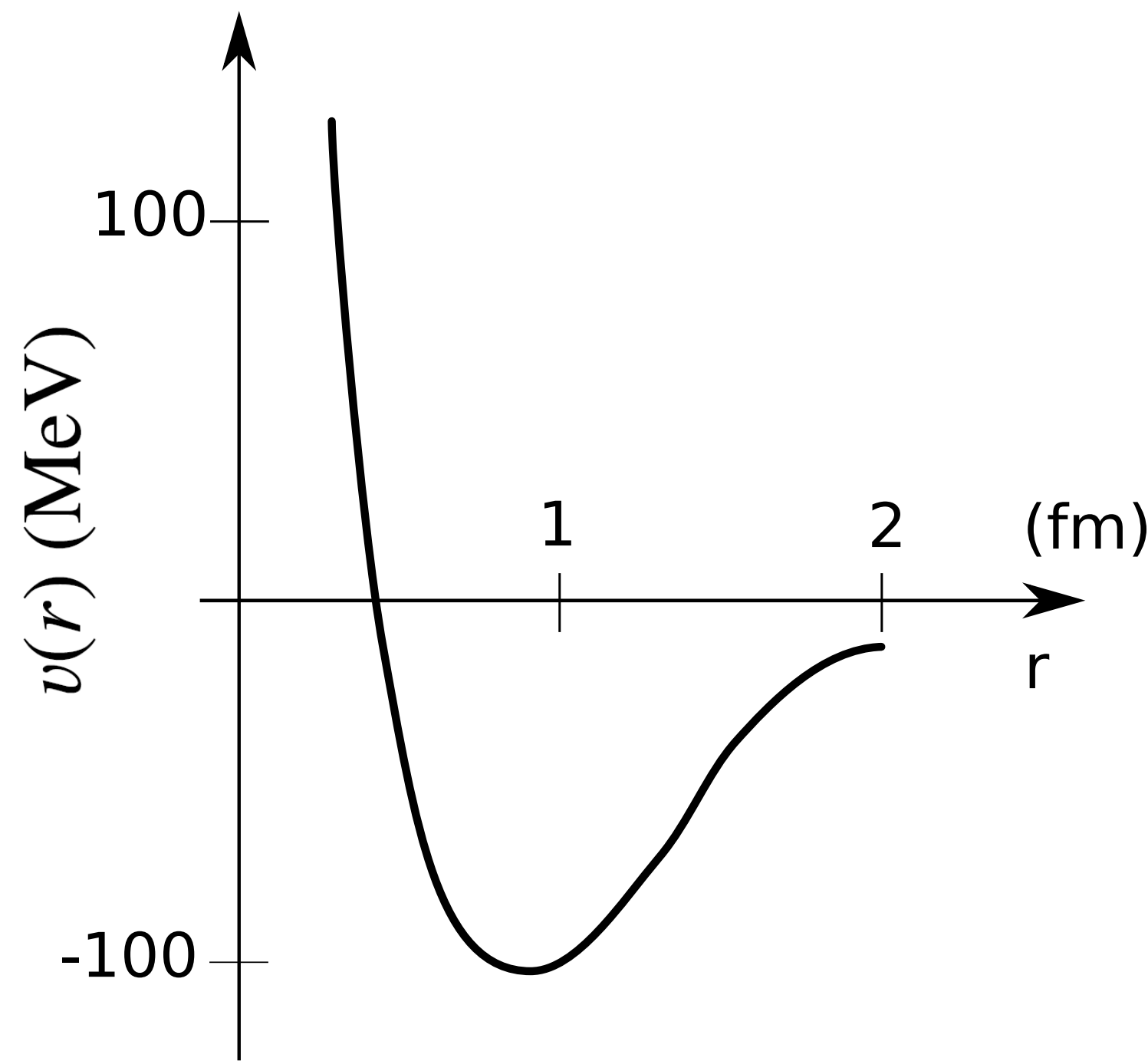


1S_0 interaction



$$q = \frac{\hbar^2}{M_n a^2} \frac{1}{|v_0|}; \quad M_n = 0.939 \text{ GeV}/c^2$$

$$a \approx 0.9 \text{ fm (range)}$$

$$v_0 \approx -100 \text{ MeV (depth)}$$