

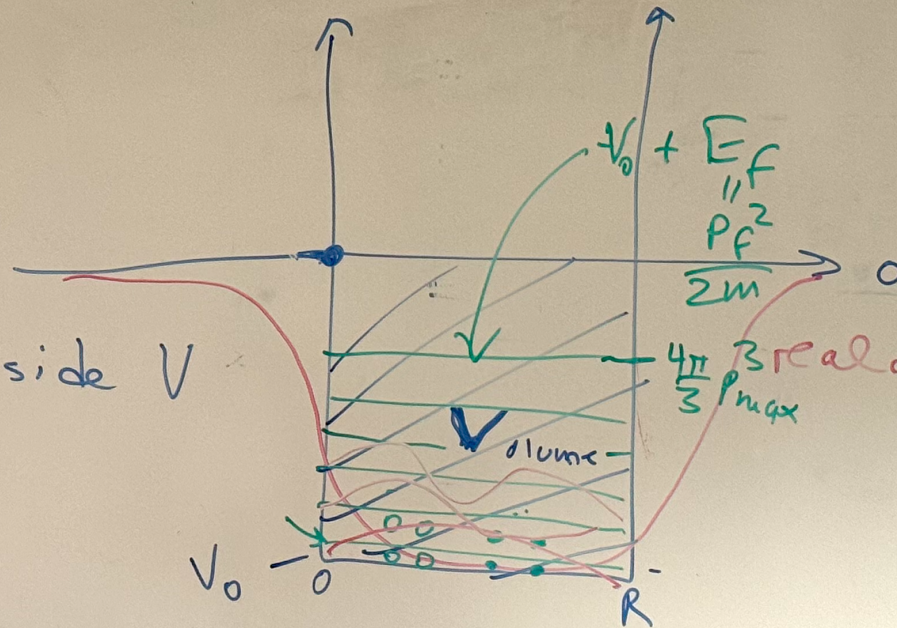
all nucleons are inside V

$\ln$ p-space

$$V_p = \frac{4\pi}{3} \rho^3$$

$\Rightarrow$ 1st 2 p fill $V_p \cdot V = h^3$
2 n

next z_p fill $V_p = \frac{4\pi}{3} \Delta p^3$



$$Z = \frac{2 \cdot V \cdot \frac{4\pi}{3} p_{Fermi}^3}{h^3}$$

$$N = \frac{2 V \frac{4\pi}{3} p_{\text{Fermi}}^3}{h^3}$$

$$(\vec{\tau}, \vec{p}) \in \mathbb{R}^6$$

For QN: h^3
unit cell of
phase space

You can have $\geq \text{spin } \frac{1}{2}$ Fermions

