p
we
m

$$N_{\uparrow excess} = N_{Total} \times \frac{N_\uparrow - N_\downarrow}{N_{Total}}$$

$$\rightarrow N_{Total} = \frac{density \times 6.022 \times 10^{23}}{} \times 1L \times 10^{-6}$$

$$\rightarrow \frac{N_\uparrow - N_\downarrow}{N_{Total}} = \frac{\gamma \hbar B_0}{2KT}$$

$N_{\uparrow excess}$ (110 M) $= 2.98 \times 10^{14}$ protons

$N_{\uparrow excess}$ (88 M) $= 2.38 \times 10^{14}$ protons