\[ \mu_B = \frac{g \mu_B B}{kT} \]

\[ \gamma = \frac{g \mu_B B}{kT} = 4.59 \times 10^{-3} \]

\[ \frac{\mu_B}{B} = 92.4 \times \frac{1}{K} \]

\[ \beta = \frac{B}{T} \approx 2.29 \times 10^{-3} \]

\[ \eta = \frac{B \chi}{B} \approx 4.59 \times 10^{-3} \]

\[ \chi = \eta \frac{kT}{B} \approx 2.29 \times 10^{-3} \]

\[ \frac{\mu_B}{kT} = 92.4 \times \frac{1}{K} \]

\[ \frac{\mu_B}{B} = 4.59 \times 10^{-3} \]

\[ \frac{\mu_B}{B} = 92.4 \times \frac{1}{K} \]
\[ U_B = -N e \exp \left( \frac{E}{kT} \right) \]
\[ Z = \exp \left( \frac{E}{kT} \right) + \exp \left( \frac{-E}{kT} \right) = 2 \cos \left( \frac{E}{kT} \right) \]
\[ S = \frac{U}{T} + Nk_B T \ln Z = 2Nk_B \left[ \ln \left( \frac{2}{e^{E/kT} + 1} \right) + \frac{1}{e^{E/kT} + 1} \right] \]