

efinge denarini ankerspina

# MULTI KANONIKOA azaltzeko Kifel 5. garia

kause da eginge denaren fragmentazio

(1)

$$[X, (V, N, E)] \longrightarrow (X, (V, N, )) \longrightarrow (X, (V, )) \longrightarrow (X, (, )) \longrightarrow (, (, ))]$$

$$\Omega$$

$$\left[ \begin{matrix} \Sigma \\ \Pi \end{matrix} \right]$$

S

Z

$$Z = \sum_s e^{-\frac{E_s}{kT}}$$

F

$$U_0 = U_{it} + U_s = kT$$

$$N_0 = N_{it} + N_s$$

$$V_0 = V_{it} + V_s$$

Z

$$Z = \sum_{N \rightarrow \infty} \sum_s e^{-\frac{E_s}{kT}} \cdot e^{\frac{\mu N}{kT}}$$

$\left[ \begin{matrix} \Sigma \\ \Pi \end{matrix} \right]$

$$[-] = \sum_V \sum_N \sum_s e^{\frac{1}{kT}(-E + \mu N - pV)}$$

$$U_0 = U_{it} + U_s = kT$$

$$N_0 = N_{it} + N_s = kT$$

$$V_0 = V_{it} + V_s = kT$$

$$U_0 = U_{it} + U_s = kT$$

$$N_0 = N_{it} + N_s = kT$$

$$V_0 = V_{it} + V_s = kT$$

Baldintza esperimentaltak : Termodinamika  
Termodinamikako formalismak

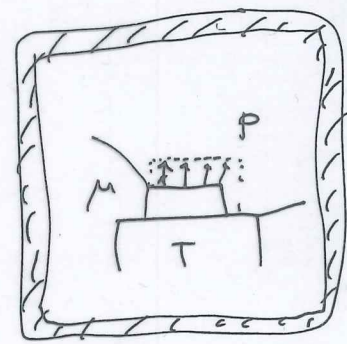
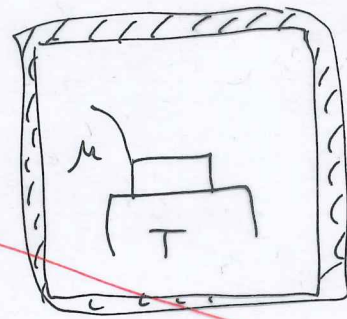
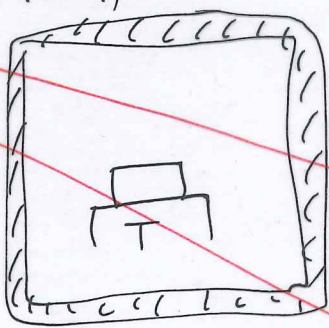
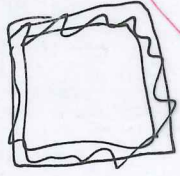
$$X_{it} = X_0 - X_s$$

$$= X_0 \left(1 - \frac{X_s}{X_0}\right) \quad \frac{X_s}{X_0} \ll 1$$

garapenaren erabilera dena

$$g_0 = g_{it} \times 1$$

anizkoitatea (multiplicity)



$$P = \frac{1}{\Omega}$$

nitena

$$\frac{P(E_1)}{P(E_2)}$$

nitena

$$\frac{g(U_0 - E_1)}{g(U_0 - E_2)}$$

$$= \frac{e^{\frac{\sigma(U_0 - E_1)}{kT}}}{e^{\frac{\sigma(U_0 - E_2)}{kT}}} = e^{\frac{\sigma(U_0 - E_1) - \sigma(U_0 - E_2)}{kT}} = e^{\frac{\Delta \sigma}{kT}}$$

$$\sigma = k \ln g \Rightarrow e^{\sigma} = g$$

$$\downarrow \text{garapena} \quad \sigma_{it}(U_0 - E) = \sigma_{it}(U_0) + \frac{\partial \sigma_{it}(U)}{\partial U} \bigg|_{U=U_0} \cdot \Delta U + \dots \Rightarrow \sigma_{it}(U_0 - E) = \sigma_{it}(U_0) - E \frac{\partial \sigma_{it}}{\partial U}$$

$$\frac{e^{-\frac{1}{kT} E_1}}{e^{-\frac{1}{kT} E_2}}$$