

$$\Gamma(N, V, E; \Delta) \simeq \frac{\partial \Sigma(N, V, E)}{\partial E} \Delta \approx \frac{3N}{2} \frac{\Delta}{E} \Sigma(N, V, E)$$

$$\ln \Gamma(N, V, E; \Delta) \approx N \left[ \frac{V}{h^3} \left( \frac{4\pi m E}{3N} \right)^{3/2} \right] + \frac{3}{2} N + \left\{ \ln \left( \frac{3N}{2} \right) + \ln \left( \frac{\Delta}{E} \right) \right\}$$

$$\ln \Gamma \approx \ln \Sigma \approx N \left[ \frac{V}{h^3} \left( \frac{4\pi m E}{3N} \right)^{3/2} \right] + \frac{3}{2} N$$

ESTADÍSTICA ERABILITA

LORTUTAKO LEHENENGO EMATZA !!

GAS IDEALA

$$S = K_B \ln [\Omega, \varepsilon, \Gamma]$$

$$S = N K_B \ln \left[ \frac{V}{h^3} \left( \frac{4\pi m E}{3N} \right)^{3/2} \right] + \frac{3}{2} N K_B$$

ARAZOA

artiketa GIBBS-en paradoxa