$$Z_m(E) \xrightarrow[\text{Laplace in } E]{} Z_c(\beta) \xrightarrow[\text{Laplace in } N]{} Z_g(\mu)$$

$$\downarrow \qquad \qquad \downarrow \qquad \qquad \downarrow$$

$$\sigma = \underbrace{S_m}_{N} \xrightarrow[\text{Legendre in } \epsilon = \frac{E}{N}]{} f = \underbrace{F}_{N} \xrightarrow[\text{Legendre in } \rho = \frac{N}{V}]{} \underbrace{\Omega}_{V}$$