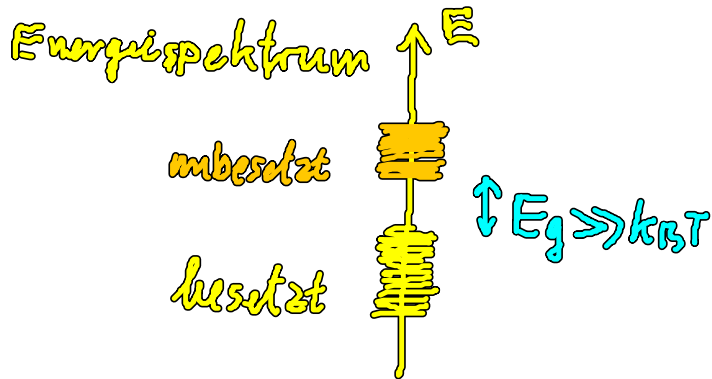
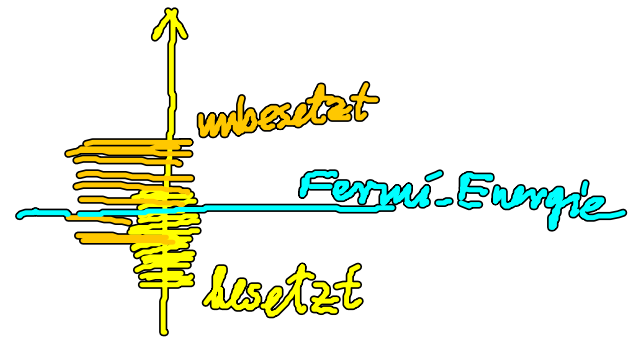


6.2 Kanonische Gesamtheit

Halbleitern



Metalle



Zustandsgleichung $p = p(T, V)$

isobare Zustandsänderungen

$$dp = \left(\frac{\partial p}{\partial T}\right)_V dT + \left(\frac{\partial p}{\partial V}\right)_T dV = 0 \quad : \frac{1}{dT}$$

$$0 = \left(\frac{\partial p}{\partial T}\right)_V + \left(\frac{\partial p}{\partial V}\right)_T \left(\frac{\partial V}{\partial T}\right)_p$$

$$0 = p\beta - \frac{B}{V}\alpha V \Rightarrow$$

$$\boxed{B\alpha = p\beta}$$

Zustandsgl. Festkörper

intrinsische Variable p, T , α, β, β molale Stoffmenge
extrinsische Variable V, N , μ, F, G partielle Stoffmenge