

Entropie eines idealen Gases

$$dS = \frac{dU}{T} + p \frac{dV}{T} = N k_B \cdot \frac{f}{2} \frac{dT}{T} + N k_B \frac{dV}{V}$$

$$\Delta S = N k_B \left(\frac{f}{2} \ln \frac{T}{T_0} + \ln \frac{V}{V_0} \right)$$