

A: Notation

- Δ change
- d, ∂ infinitesimal change
- t time
- Z partition function
- k Boltzmann's constant
- R the gas constant
- N_A Avogadro's number

Macroscopic Energies

- E energy
- F Helmholtz free energy
- G Gibbs free energy
- H enthalpy
- w work done on the system
- w' work done by the system
- q heat taken up by the system

Macroscopic Capacities

- A area
- L length
- V volume
- S entropy
- n_i moles of chemical i
- q_i charge per mole of chemical i

Conjugate Forces

- τ_2 surface tension
- τ_1 linear tension
- P pressure
- T Kelvin temperature
- u_i chemical potential of i
- ϕ electric potential
- \tilde{u}_i electrochemical potential of i

Microstate Properties

- ε_j energy of microstate j
- v_j volume of microstate j
- p_j probability of microstate j
- σ_j entropy of microstate j

This page titled [A: Notation](#) is shared under a [CC BY-NC-ND 4.0](#) license and was authored, remixed, and/or curated by [Judith Herzfeld](#).