Thermodynamics and conclusion

Trust thermodynamics!

Special Relativity

(thought experiment)

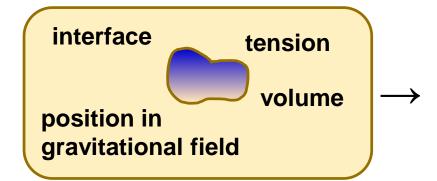
$$E = mc^2$$

 $\stackrel{\bullet}{m}$

Thermodynamics

(based on nature observation)

$$E = mc^2 + E_{\text{pot}}$$



Physics can learn from chemistry.

- G. Kalies: Vom Energieinhalt ruhender Körper (From the energy content of resting bodies), Book, De Gruyter, Berlin (2019)
- G. Kalies: Matter-Energy Equivalence, Z. Phys. Chem. 234, 1567–1602 (2020)
- G. Kalies: A solution of the time paradox of physics. Z. Phys. Chem. 1–26 (2020)
- G. Kalies, Ch. Jooss: Contrasting mass and time concepts of thermodynamics and special relativity: The case for thermodynamics, submitted (2021)

G. Kalies: Workshop on Adsorption and Characterization of Porous Solids, Leipzig, 4/2021