

Translation into English: [Chapter 2 - Catalogue of Errors for Both Theories of Relativity](#)

from the German documentation of G.O. Mueller

"*On the Absolute Magnitude of the Special Theory of Relativity - A Documentary Thought Experiment on 95 Years of Criticism (1908-2003) with Proof of 3789 Critical Works*" - Text Version 2.1 - June 2004  
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## N: Thermodynamics / Error No. 2

### **Relativistic treatment of thermodynamics by Albert Einstein (1907), Fritz Hasenöhrl (1907) and Max Planck (1907 and 1908) is incorrect**

*According to Möller (1967, pp 5-6), the errors were first recognized by H. Ott (1963), though his work "remained unnoticed until quite recently". Until then the incorrect claims were further spread unknowingly in works by R. C. Tolman (1950), C. Möller (1952), M. v. Laue (1952), W. Pauli (1958) and W. H. McCrea (1960). Independently from Ott, H. Arzéliès (1965) came to the same result as Ott. Möller (p. 6): "The paper by Arzéliès caused a whole avalanche of mutually contradicting papers on the subject." Möller sums up (p. 5): "It is a strange and rather unique incident in the history of physics that a fundamental mistake in the original derivation remained overlooked for such a long period of time."*

*- The bibliographies of all of the named works can be found via Möller.*

For the critics it is extremely exalting that in the case of thermodynamics, for a change, instead of convinced representatives of the theories of relativity, even the conditions in the world of relativity are shown to be wanting. That all of the great luminaries - from Albert Einstein via Planck, v. Laue and W. Pauli, and on to the minor masters of reproduction - were able to demonstrate and prove the validity of the STR, even in thermodynamics, uncritically and uncriticized for 6 decades shows the frame of mind of the entire branch, that typically relies on blind faith in authority and on self-praise for their earth-shaking findings.

All the more reason to recognize the willingness of Ott, Arzéliès and Möller to engage in self-correction. In the end, Möller was only mistaken as to the unmatched nature of this "unique incident".

The results of the efforts of the named authors to save "relativistic thermodynamics" were summed up by Galeczki/Marquardt (1997).

Ott, H.: Lorentz-Transformation der Wärme und der Temperatur. In: Zeitschrift für Physik. 175. 1963, pp 70-104. - Arzéliès, Henri in: Nuovo cimento. 35. 1965, p. 792. - Möller, Christian: Relativistic thermodynamics : a strange incident in the history of physics. København: Munksgaard [in Komm.], 1967. 26 pages. (Kongelige Danske Videnskabernes Selskab. Mat.-fys. meddelelser. 35, 1.) - Galeczki / Marquardt 1997, pp 192-195.