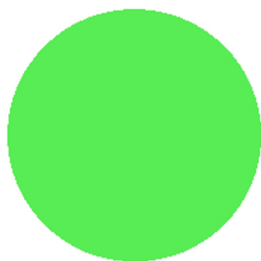


Klaus Ohlmer

**Kritik der
Lorentz-Transformationen**



mit
einem kurzen Anhang zur
Ableitung der Größe »m«
als Basisgröße und zur
Longitudinalkraft

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Abstract

The relativistic physics use *transcription equations* for the dynamic mass “ m_r ” and the real measured metric velocity “ v_r ”, but without identifying them as such. For the dynamic mass “ m_r ” the following term applies

$$m_r \cdot \alpha = m_g$$

$$(\alpha = \sqrt{1 - v^2 / c^2}, c = \text{velocity of light}, m_g = \text{metric mass}, v \leq c).$$

The next one applies to the actually measured velocity “ v_r ”, which is only used implicitly:

$$v_r / \alpha = v_g$$

(v_g as a metric velocity).

Transcriptions are always required when there are non-metric sizes and equality and multiplicity cannot be defined directly. Before they are mathematically accessible, they must therefore be subjected to a transcription process that, by rule, assigns to each non-metric value a metric value.

While creating the Lorentz transformations, the Galilean equation is split into two systems of equations.

This happens only in purpose of accommodating a mutual, i.e. relativistic distance contraction and time dilation in the dichotomized Galilean equation. In this theory the contracted distances “ s ” in the I'-system follow the mathematical relation

$$s' / \alpha = s \text{ (} s = \text{measured distance),}$$

and the dilated time “ t ” the fictional law

$$t' \cdot \alpha = t \text{ (} t = \text{measured time).}$$

The application of these descriptions that are not transcriptions, only serves the strict principle of constant light

propagation. However, a specific principle of relativity by this mutual settlement can just not be proved. Both the split x - x' -equations as well as the relative statement of Galileo's equation are completely destroyed by the introduction of mathematically formulated distance contraction and time dilation.

With the Lorentz transformations relative statements are not possible. It is only possible to have relative considerations without contradictions on the descriptions used for "s" and "t".

In addition, in these settlements all metric sizes of the Galilean transformations silently are replaced by non-metric, without providing transcription equations for them. This can physical-mathematically not be accepted.

The Lorentz transformations are preferably represented as the general form of transformations, from which the Galilean transformations can be derived as a special case for very small velocities. But the fact that the Lorentz expressions are derived from the Galilean equations gives the lie to this view, because only special cases can be deduced from general facts.

In fact, the Galilean transformation is the only general version of the mechanical principle of relativity. This also follows from the fact, that it does not underlie mathematical and physical limitations. It is not possible to deduce an even "more general" relativity principle here from.

Therefore, in physics, the Lorentz transformations must be interpreted as an attempt of description which disregards mathematical facts, and which cannot adequately represent the measured reality.

Finally you find a mathematical justified derivation of the addition of relativistic velocities.