

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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M: The General Theory of Relativity / Error No. 3

The principle of equivalence of the GTR is said to apply in the dimensions of the cosmos

For the alleged equivalence - whatever this may mean - between acceleration and gravitation Albert Einstein claims that gravitation, due to its effects in the practically unlimited dimensions of the visible cosmos, also has practically unlimited validity.

Against this standpoint V. Fok (Fock) 1952 points out the following critical circumstances. The principle of equivalence has solely local meaning. The lift (in Einstein's thought experiment) can only fall for a limited period. The earth's gravitational field cannot be switched off. The principle of equivalence cannot be applied to the solar system. Gravitational fields and acceleration cannot be mutually replaced. Acceleration has no relative character.

According to Fok, there is no reason whatsoever for a generalization of the principle of equivalence. - The meaning of the alleged "equivalence" remains completely unclear and leads to different claims, so that everyone can derive what he or she wants from the GTR. Strictly speaking, equivalence initially means only of equal value, not equality. In the present connection equal value is said to be clearly interpreted as having indistinguishability. A further interpretation as equality can relate to the equality of effects and/or of equality of measured values. And yet another step towards generalization is taken in the interpretation as identity.

Each relativistic author must therefore say in advance with which interpretation of GTR equivalence he or she is working, which occurs - of course - only in very rare cases. An identity of two opposing forces would be absurd, as would an equality of effects. Only an equality of measured value can be considered seriously. A decisive aspect of every interpretation of measured values, however, is the physical connection.

Fok, Vladimir Aleksandrovich: Le système de Ptolémée et le système de Copernic à la lumière de la théorie générale de la relativité. In: Questions scientifiques. Vol. 1: Physique. Paris 1952, pp 147-154. Reprinted from: Questions de philosophie [Voprosy filosofii]. Moskau. 1951, No. 5.