

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  
<http://www.ekkehard-friebe.de/kap2.pdf>

Translator: Rothwell Bronrowan

© Copyright Ekkehard Friebe – Oct. 2012

---

## H: Mathematics / Error No. 5

**The claim of the validity of a non-Euclidean geometry in space conceals the fact that the realization of a non-Euclidean geometry requires a measurement of curvature that can only be given in Euclidean geometry**

*Albert Einstein introduces a non-Euclidean geometry in the GTR, which is fundamentally just as possible as the introduction of any other non-contradictory geometrical structure. For realization of this non-Euclidean geometry in physical space, however, a measurement of curvature must be given. And this measurement of curvature can only be given in Euclidean geometry, because Euclidean geometry is the only geometry characterized by the fact that it can be constructed without a metrical precondition.*

*The allusion to the need for a solely Euclidean measurement of curvature was, for example, given by Hugo Dingler in 1969 (p. 164). With this it is clear at the same time why Euclidean geometry is also the predecessor and the fundament for all other conceivable geometries. It is the only geometry that can be concretely realized in physical space without extra conditions derived from another geometry; all other geometries can only be developed when embedded in Euclidean geometry.*

With the measurement of curvature from Euclidean geometry, as many non-Euclidean geometries as one wants can be developed and applied simultaneously and next to each other, and with all of these geometries existing in the same, one and only available space of physical experience. This proves that in physical space not only one geometry applies, and that space, if it has properties, can be depicted with these properties in all of these geometries. The favourite idea of all relativists of completely determined "geometrical properties" of space is not only totally without any justification, since its emergence it has been clearly refuted by the sheer variety of non-Euclidean geometries.

Dingler's allusion to the necessary measurement of curvature for realization of a non-Euclidean geometry does not prove that only Euclidean geometry applies in space, but that *only* Euclidean geometry can be developed without a metrical stipulation (a measurement): This is what makes it superior to all other geometries. The other geometries, to the extent that they require a measurement of curvature, are constructions dependent on Euclidean geometry, embedded in Euclidean geometry. The relativists do not appear to know this, or to want to believe it.

A. R. Forsyth: Geometry of four dimensions. 1930, S. X. - Dingler, Hugo: Die Ergreifung des Wirklichen [Teilausg.] : Chapters 1-4. Einleitung v. Kuno Lorenz u. Jürgen Mittelstraß. Frankfurt a. M.: Suhrkamp, 1969. 273 pages.