

Comment on "On the logical consistency of special relativity theory and non-Euclidean geometries: Platonism versus formalism"

Srinivasan, Radhakrishnan (2003) Comment on "On the logical consistency of special relativity theory and non-Euclidean geometries: Platonism versus formalism".

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Abstract

As observed in the PhilSci preprint ID Code 1255 [1], consistency in the author's proposed non-Aristotelian finitary logic (NAFL) demands that Euclid's fifth postulate must necessarily be provable from the first four, and that diagrammatic reasoning with Euclidean concepts must necessarily be admitted into the rules of inference for plane neutral geometry in order to argue for the said provability. Two important consequences, namely, the indispensable role of diagrams as formal objects of Euclidean geometry in NAFL and the resulting NAFL concept of 'line' as an infinite proper class of line segments are highlighted and elaborated upon. A misleading comment in Remark 6 of [1], regarding negation for undecidable propositions in the theory of special relativity (SR), is corrected. This comment is unrelated to the main argument in [1] and the resulting analysis reinforces the conclusions of [1] that negation and implication are problematic concepts for undecidable propositions in SR.

Commentary on: [Srinivasan, Radhakrishnan \(2003\) On the logical consistency of special relativity theory and non-Euclidean geometries: Platonism versus formalism.](#)

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