

Was the Early Calculus an Inconsistent Theory?

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Abstract

The ubiquitous assertion that the early calculus of Newton and Leibniz was an inconsistent theory is examined. Two different objects of a possible inconsistency claim are distinguished: (i) the calculus as an algorithm; (ii) proposed explanations of the moves made within the algorithm. In the first case the calculus can be interpreted as a theory in something like the logician's sense, whereas in the second case it acts more like a scientific theory. I find no inconsistency in the first case, and an inconsistency in the second case which can only be imputed to a small minority of the relevant community.

Keywords: calculus, fluxions, infinitesimals, newton, leibniz, inconsistent

Subjects: [Specific Sciences: Mathematics](#)
[General Issues: History of Science Case Studies](#)

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