

Was Newtonian Cosmology Really Inconsistent?

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Abstract

This paper follows up a debate as to the consistency of Newtonian cosmology. Whereas Malament (1995) has shown that Newtonian cosmology *is* not inconsistent, to date there has been no analysis of Norton's claim (1995) that Newtonian cosmology *was* inconsistent prior to certain advances in the 1930s, and in particular prior to Seeliger's seminal paper of 1895. In this paper I agree that there are assumptions, Newtonian and cosmological in character, and relevant to the real history of science, which are inconsistent. But there are some important corrections to make to Norton's account. Here I display for the first time the inconsistencies—four in total—in all their detail. Although this extra detail shows there to be several different inconsistencies, it also goes some way towards explaining why they went unnoticed for two hundred years.

Keywords: Newton, Newtonian, Cosmology, Inconsistent, Inconsistency, Contradiction, Theory, Theories

[General Issues: Structure of Theories](#)

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