

Philosophy of Space, Time and Spacetime: Study Questions for Newton Part II

Erik Curiel[†]

1. How does Corollary 6 fit with the statement of Law 2? What does it tell us about the possibility of assigning a definite state of motion to a body?
2. When reading the Scholium on space and time (the Scholium to the Definitions), try to ascertain what role Newton's methodological modesty and skepticism play in his analysis of spatial and temporal structures. (Recall that we briefly discussed in lecture this modesty and skepticism with regard to his remarks in the Preface that suggest that he is trying to remain as agnostic as possible about the underlying metaphysical causes of the phenomena he treats, rather trying to give only as purely a neutral description of them as possible.)
3. What is the distinction Newton wants to make between "true" and "relative" rest and motion? What is the relation of true motion to absolute motion?
4. When reading the last part of the Scholium, the paragraph beginning "The causes which distinguish..." (pp. 412 to the end), think about the methods that Newton proposes for distinguishing true from relative motions. What exactly is the Bucket Experiment supposed to show, and how? Does it actually show what Newton means it to?

[†]**Author's address:** Munich Center for Mathematical Philosophy, Ludwig-Maximilians-Universität, Ludwigstraße 31, 80539 München, Deutschland; **email:** erik@strangebeautiful.com