
Mechanics from Aristotle to Einstein by Michael J. Crowe

Santa Fe, NM: Green Lion Press, 2007. Pp. xxii + 332. ISBN 978-1-888009-32-3. Paper \$17.95

Reviewed by
Peter Machamer
University of Pittsburgh
pkmach@pitt.edu

This book is designed as a text for undergraduate courses, though the preface tells us that it has also been used for a graduate course. As a text, it is a good standard text dealing mostly with early modern physics (mechanics), with some background on Aristotle and an end section on Einstein's special and general relativity. The main part of the book covers Galileo to Newton, and, in fact, is concerned mostly with Sir Isaac himself. There are ample selections from the writings of the famous authors treated, which makes it useful for giving students some sense of primary sources. Then, there is Crowe's commentary, which is clear and for the most part admirable. There are also exercises or problems directed towards students that will help them think through the issues raised by the texts and commentary.

Crowe advances the thesis that 'a number of the main advances that occurred in mechanics were directly linked to an enriched understanding of the relativity of motion' [26]. One could quibble with certain of the interpretative claims, such as 'the law of inertia provided the Copernicans with an explanation of why objects on a moving earth were not left behind' [21] or the treatment of Newton's *Principia* as a hypothetico-deductive work [209ff.]. But with such an admirably clear commentary, these would be mere cavils. Besides, instructors need to find some faults with a text in order to make the course their own.

I do have one more serious complaint however. I called it a 'standard' text above, because like most treatments of mechanics, it gives short shrift to the 18th century. Maybe it is time for someone to write a more inclusive history, and spell out, for example, why Euler and Lagrange thought they were revolutionizing physics, and why they did not really consider themselves Newtonians.

© 2008 Institute for Research in Classical Philosophy and Science

All rights reserved

ISSN 1549-4497 (online)

ISSN 1549-4470 (print)

ISSN 1549-4489 (CD-ROM)

Aestimatio 5 (2008) 65-66

Finally, it is of note that the book is excellently produced. Green Lion Press, run by William H. Donahue and Dana Densmore, continue to publish books of outstanding quality.