

## BOOK REVIEWS

*Quantum mechanics.* By L. I. Schiff. New York, McGraw-Hill, 1949. 404 pp. \$5.50.

The subject matter of quantum mechanics is emphasized in different ways by different professional groups. To the philosopher the field has a personal interest because of its bearing on the relationship between man and the natural world about him. To the mathematician the subject represents a rich field of problems dealing with function space and operator theory. To the physicist it is important as an extension of classical physics into the domain of the microscopic world and as an indispensable tool for solving the many problems of interest.

Introductory books written for each group will exhibit corresponding differences in emphasis. That for the philosopher will stress the statistical interpretation of quantum mechanics and will deal only with the most elementary physical situations. That for a mathematician will stress the character of the boundary value problems and operators which appear, placing emphasis upon mathematical rigor. That for the physicist should expand the connection between classical and quantum mechanics, give ample illustrations of the applications of quantum mechanics to physical problems for which it was invented, and which it has been eminently successful in solving, and should at least lead to that frontier region, dealing with high energy particles, in which quantum theory is being extended at present.

This excellent book is written primarily and emphatically for the physics student so that it falls definitely in the third category. Yet the writer has managed throughout to preserve interest in the philosophical applications of the subject and in mathematical rigor; any reader will recognize that the subject is rich in philosophical connotation and that mathematical neatness and rigor have an important place in its evolution.

Perhaps the importance of the book in contemporary graduate education is best illustrated by the fact that about a half dozen theoretical physicists with whom the reviewer has spoken have commented on the fact that the text is closely similar to the lecture notes they have employed for a number of years in teaching quantum mechanics to graduate students. All regard it as one of the most important recent additions to graduate training in physics. The writer has no hesitation in saying that it probably will become the standard