sented. This is followed by Copson's solution, comparatively simple and of much wider application, and the chapter ends with an elementary discussion of the dual integral equations that arise from the Beltrami method.

The last subject is taken up more actively in chapter 4. Indeed this chapter, with the next one on dual series equations, really forms the kernel of the book, and one has the impression that the physical problems were introduced to illustrate the use of the dual equations rather than the opposite. The very full discussion of these techniques in chapters 4 and 5 is rounded off by chapter 6, on triple equations. And the book ends with several applications of the mathematical methods thus developed to various problems of electrostatics.

Mixed boundary problems have tended to be ignored in standard textbooks of applied mathematics, possibly because one has to explain so much before even starting to expound them. One notable exception is the short discussion of the subject in the same author's earlier book on Fourier transforms. The book under review therefore merits a particular welcome in that it fills a real gap in the literature. Moreover the large range of mathematical techniques presented will make it useful quite apart from the specific class of problems to which it is directed. As in his previous textbooks the author has combined his characteristic forthright style with mathematical virtuosity and with a wide knowledge of the interesting problems of physics.

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Statistics of the stars

INTRODUCTION TO STELLAR STATISTICS. By Rudolf Kurth. 175 pp. Pergamon Press, Oxford, 1967. $8.00

by George Weiss

There are two potential audiences for which this book might have been intended: astronomers interested in the applications of statistics to celestial phenomena, or statisticians wishing to acquire a feeling for the uses of statistics in astronomy. Both of these audiences are very likely to be disappointed in Rudolph Kurth's monograph.

There is a single, long chapter on probability and statistics. Compression of all of the important facts into one chapter must inevitably lead to the exclusion of many important ideas, as indeed is the result here. The reader can only conclude that the theory of statistics is limited to the classic parameters related to the normal distribution. There is no hint of distribution-free tests, sequential analysis or any work more recent than the early 1930's. Furthermore there are no examples anywhere in the book discussed in sufficient detail to allow the reader to see what issues are to be settled in real estimation problems, what sort of data there are to describe the issues, and what are other possible techniques for describing the data. Like the author, I have doubts as to the validity of recent work by Neyman and his collaborators, but the ideas that they introduce are not entirely implausible and deserve some discussion.

If one approaches the monograph from the point of view of the statistician interested in astronomy, one is also likely to be fairly uninformed after reading it. The author writes in a telegraphic style that does not allow anyone not acquainted with astronomy to acquire a clear picture of the problems that are of real interest. Again, the lack of real data is a very serious defect in the exposition. I was also disappointed that there is no mention of the role of stochastic processes in astronomy, particularly of the work of Chandresekhar, Ambarzumian and Münch. Surely, these constitute a real contribution to theoretical astronomy and deserve mention in a monograph on stellar statistics.

The subject matter treated here is potentially a fascinating field in itself. Unfortunately, the author has not succeeded in conveying the interest or excitement of the field to the reader.

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Landau's general physics

GENERAL PHYSICS: MECHANICS AND MOLECULAR PHYSICS. By L. D. Landau, A. I. Akhiezer, E. M. Lifshitz. 372 pp. Trans. from Russian. Pergamon Press, Oxford, 1967. $8.00

by H. H. Barschall

The *Course of Theoretical Physics* by Lev Landau and Eugene Lifshitz is generally regarded as an outstanding series of texts on the graduate level. Less well known is Landau's *General Physics*. In 1937 he prepared a manuscript for an introductory text but did not publish it. Notes were published, however, in 1948, based on lectures in general physics that Landau gave in the applied physics department at Moscow University.

The volume under review is based on the 1937 manuscript and the 1948 notes, and was prepared by A. I. Akhiezer and Lifshitz. Although the book was published before Landau's death, it was written after his tragic automobile accident so that he could not contribute to its preparation himself.

The subtitle of this volume is *Mechanics and Molecular Physics*. The book begins with a discussion of the basic concepts of mechanics, such as velocity, acceleration, and force. These concepts are treated clearly and simply without the confusing attempts at rigor that one finds in some of the widely used introductory texts. The