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EDITOR'S NOTE: The author has notified us that he has recomputed the tables over certain ranges of the variable in multiple precision and has found numerous last-place errors on pages 3 and 4 of $x = .0010$ to $.0100$. An Errata sheet has been prepared and is available on request.

54[M].—L. S. PONTRYAGIN, *Ordinary Differential Equations*, Addison-Wesley Publishing Company, Inc., Reading, Massachusetts, 1962, vi + 298 p., 23 cm. Price \$7.50.

From the publisher's preface: "This book constitutes a mildly radical departure from the usual one-semester first course in differential equations."

From the author's preface: "The most important and interesting applications of ordinary differential equations to engineering are found in the theory of oscillations and in the theory of automatic control. These applications were chosen to serve as guides in the selection of material."

One could attempt to characterize Pontryagin's "mildly radical departure" as a combination of more modern theory and more realistic application. There is a long chapter on stability theory, Lyapunov's theorem, limit cycles, and periodic solutions. While an earlier and even longer chapter has a title that is "classical" enough, namely, "Linear Equations with Constant Coefficients," the strong geometric emphasis, and the many diagrams of phase trajectories, nodes, saddle points, etc., are again distinctly modern in character.

It seems likely that the book will not only be successful in itself, but will also markedly influence the content of future textbooks. Although American authors are unlikely to put quite as much stress on Vyshnegradskiy's theory of the centrifugal governor and Andronov's analysis of the vacuum-tube oscillator, the approach used here will probably be widely followed.

Educational prognostications aside, the book can be recommended to those who learned differential equations the "old way" and who wish an introduction to newer technique and content. The book is interesting, and individual in style. Who but Pontryagin would combine "The breakdown in performance of governors in the middle of the 19th century is explained by the fact that, due to the development of engineering, all four quantities appearing in (15) were subjected to changes which served to diminish the stability" (page 220) with "Such cases can be easily imagined; for example, N can be the perfect set of Cantor" (page 233)?

There is a supplementary chapter on relevant matrix theory. There are no exercises.

D. S.

55[M, X].—ATHANASIOS PAPOULIS, *The Fourier Integral and its Applications*, McGraw-Hill Book Company, Inc., New York, 1962, ix + 318 p., 23 cm. Price \$10.75.

This book treats what has long been known as operational calculus from the point of view of the Fourier integral theorem and the Fourier transform rather than from the point of view of the Laplace transform. The book consists of three parts and two appendices. In the first part, in addition to the Fourier integral theorem, the convolution theorem, Parseval's formula etc., an elementary dis-