

lengthy exercises which, rather regrettably, appear at the end. A very short bibliography concludes this large volume.

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Fourier transforms and the theory of distributions, by J. Arsac.
Translated by Allen Nussbaum and Gretchen C. Heim. Prentice-Hall,
Inc., Englewood Cliffs, N. J., 1966. xv + 318 pages. \$10.00.

This book is a translation of the original French edition (Dunod, Paris, 1961). The author, one of the pioneers in the application of Fourier transforms to radio astronomy, has produced a work which should have considerable appeal to applied mathematicians or mathematically oriented engineers. The book is divided into four parts: the first part (5 chapters) lays the mathematical groundwork of the theory of Fourier transforms and distributions (warning: p. 20, the opening sentence in section 1.14 seems to have a few crucial words missing; p. 32, no restrictions are given on the exponent in Minkowski's inequality; p 71, line 9 from botton, the mystifying word "contained" should be replaced by 'ontinuous"). The second part on applications (3 chapters) covers diffraction, complex impedances and certain partial differential equations. Part 3 on linear filters (3 chapters) contains a fairly detailed presentation on resolving power theory and a too brief discussion of random processes. The final part consists of one chapter on numerical methods.

The detailed exposition of some significant present-day applications should make the book attractive to a wide audience.

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