cussions of numerical methods and applications (mostly taken from the study of compressible flows). The book should be well suited to the needs of the physicist or engineer concerned with applications of partial differential equations.

   This reviewer noticed only one inaccuracy. The definition of Green's function given on p. 141 has to be modified if the principal part of the elliptic operator is not the Laplacean.

FRITZ JOHN

Funkcje Rzeczywiste (Real functions), vol. II. By Roman Sikorski. (Monografie Matematyczne, vol. 37). Warsaw, Panstwowe Wyd-awnictwo Naukowe, 1959.

   The second volume of Sikorski's *Real functions* (cf. the review of the first volume in Bull. Amer. Math. Soc. vol. 65 (1959) pp. 305–306) deals with function spaces, orthogonal series with special treatment of Fourier series and Fourier integrals. Chapter 12 gives an account of linear normed spaces and contains an account of bi-linear operations, of convolutions of functions, rings of functions, and the distributions of Sobolev-Schwartz. Chapter 13 deals with Hilbert space and orthogonal series, with a detailed discussion of convergence almost everywhere. Chapter 14, devoted to Fourier series, includes a discussion of convergence almost everywhere, and of periodic distributions. The final chapter deals with Fourier integrals, discusses criteria of convergence and an analogue of Fejér's theorem.

   Instructive and interesting exercises accompany every paragraph. This volume continues the excellent treatment characterizing the first part—in its modern point of view and the concise and elegant development of recent results.

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