

strict irreducibility. Special results for $*$ -algebras with minimal ideals are obtained; this discussion ends with a development of the basic properties of H^* -algebras.

Appendix. Examples and applications. Most of the details are omitted (with ample reference to the literature). This allows the author to pack considerable meat into these 56 pages. The examples are chosen from algebras of operators and algebras of functions; almost all of them are non-trivial and interesting in their own right. An extensive outline of the theory of group algebras, with emphasis on the non-abelian case, follows. Discussed more briefly are convolution algebras of measures and almost periodic functions on groups.

A lengthy (49 pages) bibliography follows. Throughout the text, notes at the ends of the sections provide the appropriate references to the literature.

As prerequisites for this book, the author assumes a knowledge of the basic facts from the theory of Banach and Hilbert spaces and of the rudiments of modern algebra. By careful organization and exposition he successfully leads the reader to the frontier-of knowledge in the topics of Chapters II, III and IV, in less than 300 pages. In view of the amount of material involved and the close integration necessary, this is a remarkable achievement. It is a well written book and makes pleasant reading. Comparison with original sources shows that the proofs and organization have been thoroughly re-worked and amplified.

As may be expected there are some minor flaws. On page 260 the reference R. B. Smith [1] occurs. But there is no such entry in the bibliography even though R. B. Smith is credited in the preface for his assistance with the bibliography! The reviewer was disconcerted to find the reference to Yood [13] on page 248 in view of the fact that the bibliography lists but 10 items for him. The appropriate reference here is to the *Pacific Journal of Mathematics* vol. 10 (1960) pp. 345–362. This phenomenon occurs only in a few other spots; presumably the text was in a state of constant revision up to the final deadline for the printers.

Naturally there is some overlap with Naimark's *Normed rings*, but each book contains more material outside than inside this intersection. Serious students of the subject should read both.

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Vorlesungen über Differential- und Integralrechnung. Vol. 1, *Funktionen einer Variablen*. Zweite, neubearbeitete Auflage. By A. Ostrowski. Basel, Birkhäuser, 1960. 330 pp. + 47 fig. 35 s. fr.

The first edition of this book appeared in 1945, and was reviewed