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Second edition.

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Complete metric linear spaces (or F-spaces) were first introduced by the Banach school in the thirties, but the subject did not achieve much popularity in those early days. Much more interest was concentrated on linear spaces with the topology defined by a norm. When the first edition of this book was published in 1972 [PWN, Warsaw, 1972; MR **55** #10993], it was the first time that results in the subject had been brought together and it became an important source of material for those wanting to learn about F-spaces. Since 1972, the subject has gained in popularity and many new results have been proved.

The second edition of the book has been significantly rewritten and includes many of the recent results. The format of the book remains the same, with the new results inserted where appropriate. The first four chapters consist of the basic results, and are largely unchanged. However, an important new result that has been included here is the example due to Roberts of a rigid F-space (one without a nontrivial continuous endomorphism). Chapter five is concerned with Banach spaces, though it looks at them as locally convex spaces under the weak topology. The main new result here is also an example, due to Roberts, of a compact convex set without extreme points. Chapter six (Montel spaces and Schwartz spaces) includes many results of the author, and some new results of Turpin and Zakharyuta. In Chapters seven and eight, the theme is nuclear spaces, and it is here that a lot of new work has been included. The chapters have been completely rewritten. In fact the first result in Chapter seven is a new one. This, due to Ligard, shows that a locally pseudoconvex nuclear space is already locally convex. The definitions are given generally without any assumption of local convexity, but most of the results and examples are locally convex. This chapter includes the Crone-Robinson-Dragilev theorems on the quasi-equivalence of bases in nuclear spaces. (NB: The definition of absolutely summing operator on page 317 is incorrect.)

The final chapter is concerned with isometries of Banach spaces. Here some work of Cowie, Kalton and the reviewer on maximal norms has been included, answering questions raised in the first edition.

The book as a whole is an interesting mixture of topics, and is readily accessible. It is complemented by the recent monograph *An F-space sampler* by N. J. Kalton, N. T. Peck and J. W. Roberts [Cambridge Univ. Press, Cambridge, 1984; MR 87c:46002], and maintains its place as the basic authority on the subject of metric linear spaces. *G. V. Wood* (4-WALS)