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<<线性偏微分算子分析 第1卷 第2版(英文>>

图书基本信息

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内容概要

The progress in the theory of linear partial differential equations during the past 30 years owes much to the theory of distributionscreated by Laurent Schwartz at the end of the 1940's. It summed up agreat deal of the experience accumulated in the study of partial differ-ential equations up to that time, and it has provided an ideal frame-work for later developments. "Linear partial differential operators" be-gan with a brief summary of distribution theory for this was still un-familiar to many analysts 20 years ago. The presentation then pro-ceeded directly to the most general results available on partial differ-ential operators. Thus the reader was expected to have some prior fa-miliarity with the classical theory although it was not appealed to ex-plicitly. Today it may no longer be necessary to include basic distribution theory but it does not seem reasonable to assume a classical background in the theory of partial differential equations since mod- ern treatments are rare. Now the techniques developed in the study of singularities of solutions of differential equations make it possible to regard a fair amount of this material as consequences of extensions of distribution theory. Rather than omitting distribution theory I have therefore decided to make the first volume of this book a greatly ex-panded treatment of it. The title has been modified so that it indicates the general analytical contents of this volume.

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