

<<谱方法和高精度算法及其应用>>

图书基本信息

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## <<谱方法和高精度算法及其应用>>

### 内容概要

《谱方法和高精度算法及其应用（英文）》是作者多年教学与科研工作的总结，曾经在香港中文大学，香港浸会大学，加拿大和中国科学院给研究生使用过。

主要介绍一些高精度的计算方法，以及相关的程序设计。

《谱方法和高精度算法及其应用（英文）》共分5章，第一章主要介绍准谱方法，第二章介绍时态离散和FFT，第三章介绍2D中的谱方法，第四章介绍迭代法和第五章主要是应用程序设计。

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编辑推荐

《谱方法和高精度算法及其应用（英文）》对一些新的科学计算法通过深入浅出的方法作了系统的介绍，并着重培养学生对程序设计的兴趣。

This book expands lectur enotes by the authors taught in the past few years in USA , Canada and China . The overall emphasis of these notes is to present basic algorithms together with some applications of spectral methods . The aim is to provide a sufficient background on the implementation and analysis of spectral and high-order methods so that the readers can approach the current research literature with the necessary tools and understanding . It is expected that this book will be a useful supplement for people studying spectral methods on their own . This book iS especially suited to students interested in high-order methods for PDEs . but it will appeal to numerical analysis and mathematically oriented students and researchers in engineering , physics , and related areas .

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