

<<常微分方程的解法1>>

图书基本信息

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作者：海尔

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内容概要

本书主要论述非刚性常微分方程。

第一章介绍自牛顿、莱布尼兹、欧拉和哈密尔顿以来经典理论的历史发展，极限环及奇异吸引子。

第二章用现代观念阐述龙格库塔方法和外插法，并讨论稠密输出的连续方法、并行龙格库塔方法、哈密尔顿系统的特殊方法、二阶常微分方程和时滞方程。

第三章从多步方法的古典理论开始，论述变步长方法和Nordsieck方法及一般线性方法的理论。

本书包括非刚性问题在物理、化学、生物和天文中的应用，计算机程序及数值比较。

第二版中重写了某些章节，增加了新的内容。

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作者简介

作者：(瑞士)海尔 等

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编辑推荐

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