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<<常微分方程基础理论（影印版）>>

图书基本信息

书名：<<常微分方程基础理论（影印版）>>

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作者：赫斯赫

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前言

为了更好地借鉴国外数学教育与研究的成功经验，促进我国数学教育与研究事业的发展，提高高等学校数学教育教学质量，本着“为我国热爱数学的青年创造一个较好的学习数学的环境”这一宗旨，天元基金赞助出版“天元基金影印数学丛书”。
该丛书主要包含国外反映近代数学发展的纯数学与应用数学方面的优秀书籍，天元基金邀请国内各个方向的知名数学家参与选题的工作，经专家遴选、推荐，由高等教育出版社影印出版。
为了提高我国数学研究生教学的水平，暂把选书的目标确定在研究生教材上。
当然，有的书也可作为高年级本科生教材或参考书，有的书则介于研究生教材与专著之间。
欢迎各方专家、读者对本丛书的选题、印刷、销售等工作提出批评和建议。

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内容概要

本书为开展常微分方程研究工作的读者提供必要的准备知识，可作为本科高年级和研究生常微分方程课程教材。

本书内容分为四部分：第一部分(第一、二、三章)的内容包括解的存在性、唯一性、对数据的光滑依赖性，以及解的非唯一性；第二部分(第四、六、七章)讨论线性常微分方程，书中用矩阵的S-N分解代替Jordan分解，前者的计算较后者更容易；第三部分(第八、九、十章)讨论非线性常微分方程的稳定性、渐近稳定性等几何理论；第四部分(第五、十一，十二、十三章)讨论常微分方程的幂级数解，包括线性常微分方程的奇点分类及非线性常微分方程当参数或自变量趋向某奇点时的渐近解等。

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