

<<群的线性表示>>

图书基本信息

书名：<<群的线性表示>>

13位ISBN编号：9787510005640

10位ISBN编号：7510005647

出版时间：2010-4

出版时间：世界图书出版公司

作者：温贝格

页数：146

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

## 前言

This book gives an exposition of the fundamentals of the theory of linear representations of finite and compact groups, as well as elements of the theory of linear representations of Lie groups. As an application we derive the Laplace spherical functions. The book is based on lectures that I delivered in the framework of the experimental program at the Mathematics-Mechanics Faculty of Moscow State University and at the Faculty of Professional Skill Improvement. My aim has been to give as simple and detailed an account as possible of the problems considered. The book therefore makes no claim to completeness. Also, it can in no way give a representative picture of the modern state of the field under study as does, for example, the monograph of A. A. Kirillov [3]. For a more complete acquaintance with the theory of representations of finite groups we recommend the book of C. W. Curtis and I. Reiner [2], and for the theory of representations of Lie groups, that of M. A. Naimark [6].

## <<群的线性表示>>

### 内容概要

本书以作者在莫斯科大学讲演稿为蓝本，主要目的是尽可能简明、详尽地将遇到的问题阐述清楚。书中全面展示有限群和紧群线性表示理论基础知识，给出了李群线性表示理论的基本知识以及李群表示论的一些基本观点，详尽讲述了群 $SU_2$ 和 $SO_2$ 表示论部分，作为应用仔细推导了拉普拉斯球面函数。书中有一些例子和练习，并对部分习题附有解答。

## 书籍目录

Preface Introduction 0 Basic Notions I General Properties of Representations 1 Invariant Subspaces 2 Complete Reducibility of Representations of Compact Groups 3 Basic Operations on Representations 4 Properties of Irreducible Complex Representations II Representations of Finite Groups 5 Decomposition Of the Regular Representation 6 Orthogonality Relations III Representations of Compact Groups 7 The Groups  $SU_2$  and  $SO_3$  8 Matrix Elements of Compact Groups 9 The Laplace Spherical Functions IV Representations of Lie Groups 10 General Properties of Homomorphisms and Representations of Lie Groups 11 Representations of  $SU_2$  and  $SO_3$  Appendices A1 Presentation of Groups By Means of Generators and Relations A2 Tensor Products A3 The Convex Hull of a Compact Set A4 Conjugate Elements in Groups Answers and Hints to Exercises List of Notations References Index

<<群的线性表示>>

版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:<http://www.tushu007.com>