

<<Calculus of variatio>>

图书基本信息

书名：<<Calculus of variations变分法>>

13位ISBN编号：9780486630694

10位ISBN编号：0486630692

出版时间：Dover Publications

作者：Weinstock,Robert

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>

## &lt;&lt;Calculus of variatio&gt;&gt;

## 内容概要

This book by Robert Weinstock was written to fill the need for a basic introduction to the calculus of variations. Simply and easily written, with an emphasis on the applications of this calculus, it has long been a standard reference of physicists, engineers and applied mathematicians.

The author begins slowly, introducing the reader to the calculus of variations, and supplying lists of essential formulae and derivations. Later chapters cover isoperimetric problems, geometrical optics, Fermat's principle, dynamics of particles, the Sturm-Liouville eigenvalue-eigenfunction problem, the theory of elasticity, quantum mechanics, and electrostatics. Each chapter ends with a series of exercises which should prove very useful in determining whether the material in that chapter has been thoroughly grasped.

The clarity of exposition makes this book easily accessible to anyone who has mastered first-year calculus with some exposure to ordinary differential equations. Physicists and engineers who find variational methods evasive at times will find this book particularly helpful.

<<Calculus of variatio>>

书籍目录

PREFACE

CHAPTER 1 INTRODUCTION

CHAPTER 2 BACKGROUND PRELIMINARIES

CHAPTER 3 INTRODUCTORY PROBLEMS

CHAPTER 4 ISOPERIMETRIC PROBLEMS

CHAPTER 5 GEOMETRICAL OPTICS: FERMAT'S PRINCIPLE

CHAPTER 6 DYNAMICS OF PARTICLES

CHAPTER 7 TWO INDEPENDENT VARIABLES: THE VIBRATING STRING

CHAPTER 8 THE STURM-LIOUVILIE OIGENVALUE-EIGENFUNG-TION PROBLEM

CHAPTER 9 SEVERAL INDEPENDENT VARIABLES: THE VIBRAT-ING MEMBRANE

CHAPTER 10 THEORY OF ELASTICITY

CHAPTER 11 QUANTUM MECHANICS

CHAPTER 12 ELECTROSTATICS

BIBLIOGRAPHY

INDEX

<<Calculus of variatio>>

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>