

图书基本信息

书名：<<一阶偏微分方程及其在物理中的应用PARTIAL DIFFERENTIAL EQUATIONS OF FIRST ORDER AND THEIR APPLICATIONS TO PHYSICS>>

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内容概要

This book is about the theory and applications of Partial Differential Equations of First Order (PDEFO). Many interesting topics in physics such as constant motion of dynamical systems, renormalization theory, Lagrange transformation, ray trajectories, and Hamilton – Jacobi theory are or can be formulated in terms of partial differential equations of first order. In this book, the author illustrates the utility of the powerful method of PDEFO in physics, and also shows how PDEFO are useful for solving practical problems in different branches of science. The book focuses mainly on the applications of PDEFO, and the mathematical formalism is treated carefully but without diverging from the main objective of the book.

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