<<洛伦兹与庞加不变性>>

图书基本信息

书名：<<洛伦兹与庞加不变性>>

13位ISBN编号：9789810247218

10位ISBN编号：9810247214

出版时间：2001-12

出版时间：Penguin

作者：Jong-Ping Hsu，Yuan-Zhong Zhang 著

页数：583

<<洛伦兹与庞加不变性>>

内容概要

This collection of papers provides a broad view of the development of Lorentz and Poincar é invariance and spacetime symmetry throughout the past 100 years. The issues explored in these papers include: (1) formulations of relativity theories in which the speed of light is not a universal constant but which are consistent with the four-dimensional symmetry of the Lorentz and Poincar é groups and with experimental results, (2) analyses and discussions by Reichenbach concerning the concepts of simultaneity and physical time from a philosophical point of view, and (3) results achieved by the union of the relativity and quantum theories, marking the beginnings of quantum electrodynamics and relativistic quantum mechanics. Ten of the fundamental experiments testing special relativity are also discussed, showing that they actually support a four-dimensional spacetime based on broad Lorentz and Poincar é invariance which is more general than and includes the special theory of relativity. The generalization of the concepts of simultaneity, physical time and the nature of the speed of light within a four-dimensional spacetime framework leads to the conclusion that the symmetries embodied by the special theory of relativity can be realized using only a single postulate - the principle of relativity for physical laws.

<<洛伦兹与庞加不变性>>

书籍目录

<<洛伦兹与庞加不变性>>

版权说明