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<<物理学家和工程师用的现代数学方 >

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内容概要

The purpose of Modern Mathematical Methods for Physicists and Engineers is to help grad-uate and advanced undergraduate students of the physical sciences and engineering acquire a sufficient mathematical background to make intelligent use of modem computational and analytical methods. This book responds to my students ' repeated requests for a mathematical methods text with a modem point of view and choice of topics.

For the past fifteen years I have taught graduate courses in computational and mathematical physics. Before introducing the course on which this book is based, I found it necessary, in courses ranging from numerical methods to the applications of group theory in physics, to summarize the rudiments of linear algebra and functional analysis before proceeding to the ostensible subjects of the course. The questions of the students who studied early drafts of this work have helped to shape the presentation. Some students working concurrently in nearby telecommunication, semiconductor, or aerospace, industries have contributed significantly to the substance of portions of the book.

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