

<<向量微积分>>

图书基本信息

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内容概要

Vector calculus is the fundamental language of mathematical physics. It provides a way to describe physical quantities in three-dimensional space and the way in which these quantities vary. Many topics in the physical sciences can be analysed mathematically using the techniques of vector calculus. These topics include fluid dynamics , solid mechanics and electromagnetism , all of which involve a description of vector and scalar quantities in three dimensions. This book assumes no previous knowledge of vectors. However , it is assumed that the reader has a knowledge of basic calculus , including differentiation , integration and partial differentiation. Some knowledge of linear algebra is also required , particularly the concepts of matrices and determinants.

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