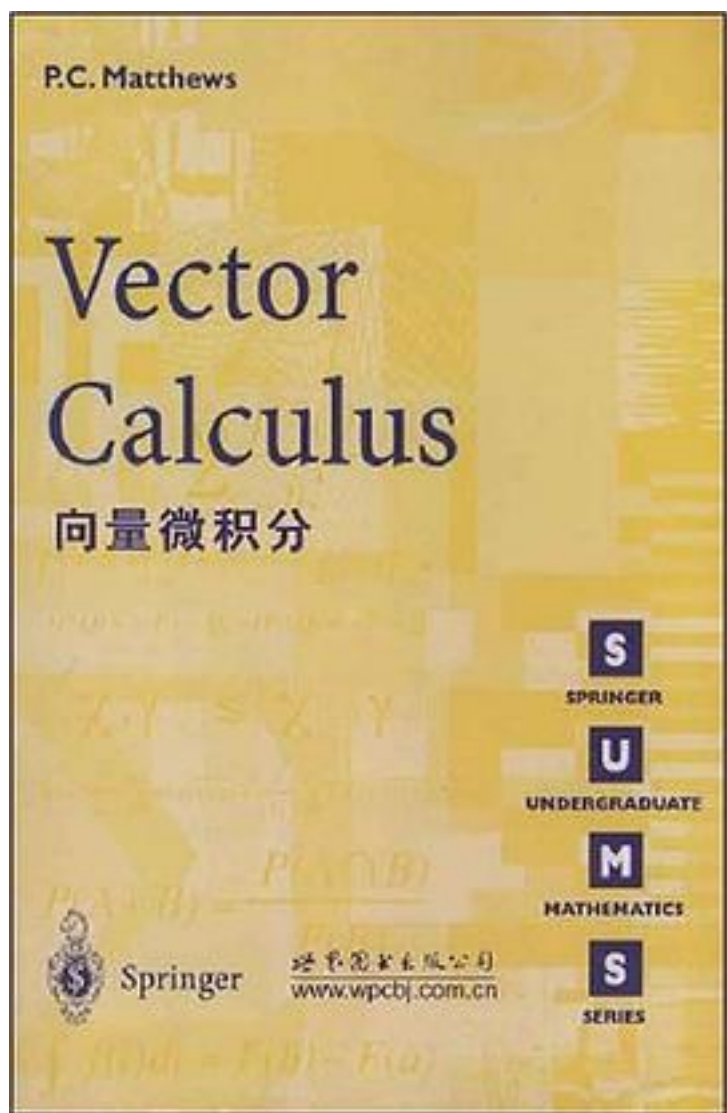


向量微积分



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《向量微积分》主要内容：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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书评

书名叫向量微积分，就是所谓的矢量分析。目前国内的单独成书的矢量分析并不多见。这本书讲矢量分析对物理意义讲的很清楚明白，在计算上引入了张量，但又不像一些张量分析的书让人觉得恶心，结果是由于张量的引入让一些矢量分析的等式的证明变得相当容易。这本书强烈推荐给学物...

这东西讲得非常通俗易懂，学完偏微分与重积分之后就可以看了，越早看越好，因为再往后学了别的东西之后就不想看了……假如时间有限的话，可以只读第 4，6，7 章。其中 Chapter 4 讲了怎么简洁地用指标记法来算矢量表达式，并利用它证明了一些场论里面的微分恒等式。关键在于...

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