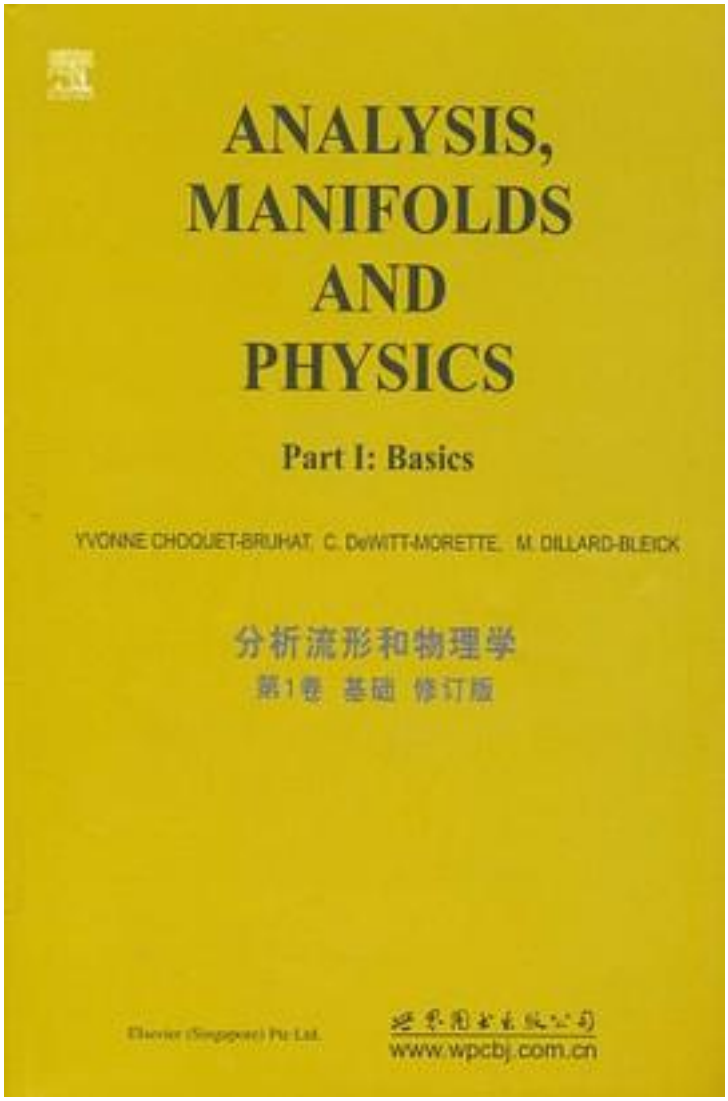
分析流形和物理学



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《分析流形和物理学(第1卷):基础(修订版)》内容简介：All too often in physics familiarity is a substitute for understanding, andthe beginner who lacks familiarity wonders which is at fault: physics orhimself. Physical mathematics provides well defined concepts and techni-ques for the study of physical systems. It is more than mathematicaltechniques used in the solution of problems which have already beenformulated; it helps in the very formulation of the laws of physicalsystems and brings a better understanding of physics. Thus physicalmathematics includes mathematics which gives promise of being useful inour analysis of physical phenomena. Attempts to use mathematics for thispurpose may fail because the mathematical tool is too crude; physics maythen indicate along which lines it should be sharpened. In fact, theanalysis of physical systems has spurred many a new mathematicaldevelopment.

Considerations of relevance to physics underlie the choice of materialincluded here. Any choice is necessarily arbitrary; we included first thetopics which we enjoy most but we soon recognized that instant gratifica-tion is a short range criterion. We then included material which can beappreciated only after a great deal of intellectual asceticism but which maybe farther reaching. Finally, this book gathers the starting points of somegreat currents of contemporary mathematics. It is intended for anadvanced physical mathematics course.

作者介绍:

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评论

很好的睡前读物。六百多页覆盖了抽象代数、拓扑、测度、泛函、微分流形、张量代数、李群、外微分。码农表示此书自学很受伤只能大略感受下。

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