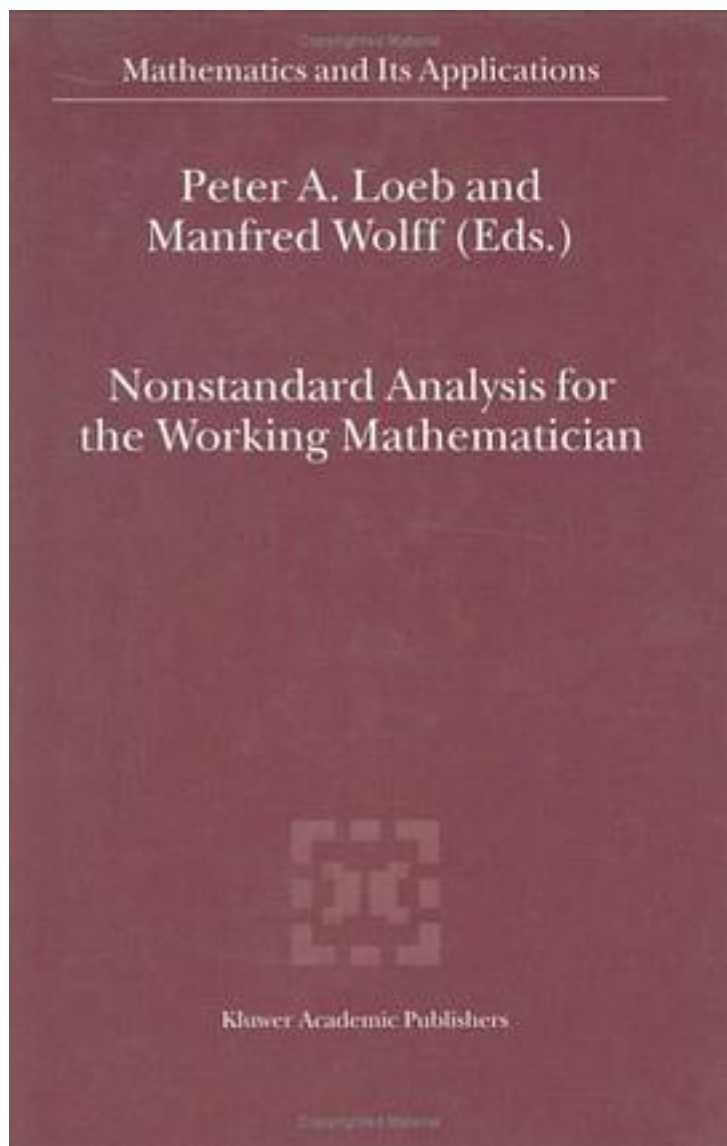


Nonstandard Analysis for the Working Mathematician



[Nonstandard Analysis for the Working Mathematician_ 下载链接1](#)

著者:Loeb, Peter A. (EDT)/ Wolff, Manfred P. H. (EDT)

出版者:

出版时间:2000-6

装帧:

isbn:9780792363408

This book is addressed to mathematicians working in analysis and its applications. The aim is to provide an understandable introduction to the basic theory of non-standard analysis and to illuminate some of its most striking applications. Problems are posed in all chapters. The opening chapter of the book presents a simplified form of the general theory that is suitable for the results of calculus and basic real analysis. The presentation is intended to facilitate the acquisition of basic skills in the subject, so that a reader who begins with no background in mathematical logic should find it relatively easy to continue. The book then proceeds with the full theory. Following Part I, each chapter takes up a different field for applications, beginning with a gentle introduction that even non-experts can read with profit. The remainder of each chapter is then addressed to experts, showing how to use non-standard analysis in the search for solutions of open problems and how to obtain rich new structures that produce deep insights into the field under consideration. The particular applications discussed here are in functional analysis including operator theory, probability theory including stochastic processes, and economics including game theory and financial mathematics. In working through this book the reader should gain many new and helpful insights into the enterprise of mathematics. Audience: This work will be of interest to specialists whose work involves real functions, probability theory, stochastic processes, logic and foundations. Much of the book, in particular the introductory Part I, can be used in a graduate course.

作者介绍:

目录:

[Nonstandard Analysis for the Working Mathematician 下载链接1](#)

标签

Mathematics

评论

[Nonstandard Analysis for the Working Mathematician 下载链接1](#)

书评

[Nonstandard Analysis for the Working Mathematician 下载链接1](#)