



Nonstandard analysis and its applications /

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Monografía

This textbook is an introduction to non-standard analysis and to its many applications. Non standard analysis (NSA) is a subject of great research interest both in its own right and as a tool for answering questions in subjects such as functional analysis, probability, mathematical physics and topology. The book arises from a conference held in July 1986 at the University of Hull which was designed to provide both an introduction to the subject through introductory lectures, and surveys of the state of research. The first part of the book is devoted to the introductory lectures and the second part consists of presentations of applications of NSA to dynamical systems, topology, automata and orderings on words, the non- linear Boltzmann equation and integration on non-standard hulls of vector lattices. One of the book's attractions is that a standard notation is used throughout so the underlying theory is easily applied in a number of different settings. Consequently this book will be ideal for graduate students and research mathematicians coming to the subject for the first time and it will provide an attractive and stimulating account of the subject

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